## SEQUENCE LISTING

<110>	Yang,	Meija	ı										
<120>	NOVEL	THERA	APEUTIC	FUS	ION	PROT	EINS	;					
<130>	ARS-12	21											
<140> <141>	US 10, 2006-0		929										
<150> <151>	US 60, 2003-0		397									•	
<160>	24												
<170>	Patent	tIn ve	ersion	3.1									
<210><211><211><212><213>	1 183 PRT Homo s	sapier	าร										
Arg Le 1	u Leu i	Arg Se	er His	Ser	Leu	His	Tyr 10	Leu	Phe	Met	Gly	Ala 15	Ser
Glu Gl	_	Leu Gi 20	ly Leu	Ser	Leu	Phe 25	Glu	Ala	Leu	Gly	Tyr 30	Val	Asp
Asp Gl	n Leu 1 35	Phe Va	al Phe	Tyr	Asp 40	His	Glu	Ser	Arg	Arg 45	Val	Glu	Pro
Arg Th 50		Trp V	al Ser	Ser 55	Arg	Ile	Ser	Ser	Gln 60	Met	Trp	Leu	Gln
Leu Se 65	r Gln	Ser L	eu Lys 70	Gly	Trp	Asp	His	Met 75	Phe	Thr	Val	Asp	Phe 80
Trp Th	r Ile	Met G 8	lu Asn 5	His	Asn	His	Ser 90	Lys	Glu	Ser	His	Thr 95	Leu
Gln Va		Leu G 100	ly Cys	Glu	Met	Gln 105	Glu	Asp	Asn	Ser	Thr 110	Glu	Gly
Tyr Tr	p Lys 115	Tyr G	ly Tyr	Asp	Gly 120	Gln	Asp	His	Leu	Glu 125	Phe	Cys	Pro
Asp Th		Asp T	rp Arg	Ala 135	Ala	Glu	Pro	Arg	Ala 140	Trp	Pro	Thr	Lys
Leu Gl 145	u Trp	Glu A	rg His 150	Lys	Ile	Arg	Ala	Arg 155	Gln	Asn	Arg	Ala	Tyr 160

Leu Glu Arg Asp Cys Pro Ala Gln Leu Gln Gln Leu Glu Leu Gly
165 170 175

Arg Gly Val Leu Asp Gln Gln 180

<210> 2

<211> 661

<212> PRT

<213> Homo sapiens

<400> 2

Gly Pro Pro Val Ser Cys Ile Lys Arg Asp Ser Pro Ile Gln Cys Ile 1 5 10 15

Gln Ala Ile Ala Glu Asn Arg Ala Asp Ala Val Thr Leu Asp Gly Gly 20 25 30

Phe Ile Tyr Glu Ala Gly Leu Ala Pro Tyr Lys Leu Arg Pro Val Ala 35 40 45

Ala Glu Val Tyr Gly Thr Glu Arg Gln Pro Arg Thr His Tyr Tyr Ala 50 60

Val Ala Val Val Lys Lys Gly Gly Ser Phe Gln Leu Asn Glu Leu Gln 65 70 75 80

Gly Leu Lys Ser Cys His Thr Gly Leu Arg Arg Thr Ala Gly Trp Asn 85 90 95

Val Pro Ile Gly Thr Leu Arg Pro Phe Leu Asn Trp Thr Gly Pro Pro 100 105 110

Glu Pro Ile Glu Ala Ala Val Ala Arg Phe Phe Ser Ala Ser Cys Val 115 120 125

Pro Gly Ala Asp Lys Gly Gln Phe Pro Asn Leu Cys Arg Leu Cys Ala 130 135 140

Gly Thr Gly Glu Asn Lys Cys Ala Phe Ser Ser Gln Glu Pro Tyr Phe 145 150 155 160

Ser Tyr Ser Gly Ala Phe Lys Cys Leu Arg Asp Gly Ala Gly Asp Val 165 170 175

Ala Phe Ile Arg Glu Ser Thr Val Phe Glu Asp Leu Ser Asp Glu Ala 180 185 190

Glu Arg Asp Glu Tyr Glu Leu Leu Cys Pro Asp Asn Thr Arg Lys Pro 195 200 205

Val Asp Lys Phe Lys Asp Cys His Leu Ala Arg Val Pro Ser His Ala

210		215		220	
Val Val Ala 225	Arg Ser Val 230	Asn Gly Ly	ys Glu Asp 235	Ala Ile	Trp Asn Leu 240
Leu Arg Gln	Ala Gln Glu 245	Lys Phe Gl	ly Lys Asp 250	Lys Ser	Pro Lys Phe 255
Gln Leu Phe	Gly Ser Pro 260	Ser Gly Gl 26			Phe Lys Asp 270
Ser Ala Ile 275	Gly Phe Ser	Arg Val Pr 280	ro Pro Arg	Ile Asp 285	Ser Gly Leu
Tyr Leu Gly 290	Ser Gly Tyr	Phe Thr Al 295	la Ile Gln	Asn Leu 300	Arg Lys Ser
Glu Glu Glu 305	Val Ala Ala 310	Arg Arg Al	la Arg Val 315	Val Trp	Cys Ala Val 320
Gly Glu Gln	Glu Leu Arg 325	Lys Cys As	sn Gln Trp 330	Ser Gly	Leu Ser Glu 335
Gly Ser Val	Thr Cys Ser 340	Ser Ala Se			Cys Ile Ala 350
Leu Val Leu 355	Lys Gly Glu	Ala Asp Al 360	la Met Ser	Leu Asp 365	Gly Gly Tyr
Val Tyr Thr 370	Ala Gly Lys	Cys Gly Le 375		Val Leu 380	Ala Glu Asn
Tyr Lys Ser 385	Gln Gln Ser 390	Ser Asp Pr	co Asp Pro 395	Asn Cys	Val Asp Arg 400
Pro Val Glu	Gly Tyr Leu 405	Ala Val Al	la Val Val 410	Arg Arg	Ser Asp Thr 415
Ser Leu Thr	Trp Asn Ser 420	Val Lys Gl 42	ly Lys Lys 25		His Thr Ala 430
Val Asp Arg 435	Thr Ala Gly	Trp Asn Il 440	le Pro Met	Gly Leu 445	Leu Phe Asn
Gln Thr Gly 450	Ser Cys Lys	Phe Asp Gl 455	lu Tyr Phe	Ser Gln 460	Ser Cys Ala
Pro Gly Ser 465	Asp Pro Arg 470	Ser Asn Le	eu Cys Ala 475	Leu Cys	Ile Gly Asp 480
Glu Gln Gly	Glu Asn Lys 485	Cys Val Pr	co Asn Ser 490	Asn Glu	Arg Tyr Tyr 495
Gly Tyr Thr	Gly Ala Phe 500	Arg Cys Le			Gly Asp Val 510

Ala Phe Val Lys Asp Val Thr Val Leu Gln Asn Thr Asp Gly Asn Asn 515 520 525

Asn Glu Ala Trp Ala Lys Asp Leu Lys Leu Ala Asp Phe Ala Leu Leu 530 540

Cys Leu Asp Gly Lys Arg Lys Pro Val Thr Glu Ala Arg Ser Cys His 545 550 555 560

Leu Ala Met Ala Pro Asn His Ala Val Val Ser Arg Met Asp Lys Val 565 570 575

Glu Arg Leu Lys Gln Val Leu Leu His Gln Gln Ala Lys Phe Gly Arg 580 585 590

Asn Gly Ser Asp Cys Pro Asp Lys Phe Cys Leu Phe Gln Ser Glu Thr 595 600 605

Lys Asn Leu Leu Phe Asn Asp Asn Thr Glu Cys Leu Ala Arg Leu His 610 620

Gly Lys Thr Thr Tyr Glu Lys Tyr Leu Gly Pro Gln Tyr Val Ala Gly 625 630 635 640

Ile Thr Asn Leu Lys Lys Cys Ser Thr Ser Pro Leu Leu Glu Ala Cys 645 650 655

Glu Phe Leu Arg Lys 660

<210> 3

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3

Val Pro Pro Leu Val Lys Val Thr His His Val Thr Ser Ser Val Thr 1 5 10 15

Thr Leu Arg Cys Arg Ala Leu Asn Tyr Tyr Pro Gln Asn Ile Thr Met 20 25 30

Lys Trp Leu Lys Asp Lys Gln Pro Met Asp Ala Lys Glu Phe Glu Pro 35 40 45

Lys Asp Val Leu Pro Asn Gly Asp Gly Thr Tyr Gln Gly Trp Ile Thr 50 55 60

Leu Ala Val Pro Pro Gly Glu Glu Gln Arg Tyr Thr Cys Gln Val Glu 65 70 75 80

His Pro Gly Leu Asp Gln Pro Leu Ile Val Ile Trp

<2	1	0	>	4

<211> 753

<212> PRT

<213> Artificial sequence

<220>

<223> Lactoferin / HFE-based recycling domain RC1

<400> 4

Gly Pro Pro Val Ser Cys Ile Lys Arg Asp Ser Pro Ile Gln Cys Ile
1 5 10 15

Gln Ala Ile Ala Glu Asn Arg Ala Asp Ala Val Thr Leu Asp Gly Gly
20 25 30

Phe Ile Tyr Glu Ala Gly Leu Ala Pro Tyr Lys Leu Arg Pro Val Ala 35 40 45

Ala Glu Val Tyr Gly Thr Glu Arg Gln Pro Arg Thr His Tyr Tyr Ala
50 55 60

Val Ala Val Val Lys Lys Gly Gly Ser Phe Gln Leu Asn Glu Leu Gln 65 70 75 80

Gly Leu Lys Ser Cys His Thr Gly Leu Arg Arg Thr Ala Gly Trp Asn 85 90 95

Val Pro Ile Gly Thr Leu Arg Pro Phe Leu Asn Trp Thr Gly Pro Pro
100 105 110

Glu Pro Ile Glu Ala Ala Val Ala Arg Phe Phe Ser Ala Ser Cys Val 115 120 125

Pro Gly Ala Asp Lys Gly Gln Phe Pro Asn Leu Cys Arg Leu Cys Ala 130 135 140

Gly Thr Gly Glu Asn Lys Cys Ala Phe Ser Ser Gln Glu Pro Tyr Phe 145 150 155 160

Ser Tyr Ser Gly Ala Phe Lys Cys Leu Arg Asp Gly Ala Gly Asp Val 165 170 175

Ala Phe Ile Arg Glu Ser Thr Val Phe Glu Asp Leu Ser Asp Glu Ala 180 185 190

Glu Arg Asp Glu Tyr Glu Leu Leu Cys Pro Asp Asn Thr Arg Lys Pro 195 200 205

Val Asp Lys Phe Lys Asp Cys His Leu Ala Arg Val Pro Ser His Ala 210 215 220 Val Val Ala Arg Ser Val Asn Gly Lys Glu Asp Ala Ile Trp Asn Leu 225 230 Leu Arg Gln Ala Gln Glu Lys Phe Gly Lys Asp Lys Ser Pro Lys Phe 250 245 Gln Leu Phe Gly Ser Pro Ser Gly Gln Lys Asp Leu Leu Phe Lys Asp Ser Ala Ile Gly Phe Ser Arg Val Pro Pro Arg Ile Asp Ser Gly Leu 280 Tyr Leu Gly Ser Gly Tyr Phe Thr Ala Ile Gln Asn Leu Arg Lys Ser 295 Glu Glu Glu Val Ala Ala Arg Arg Ala Arg Val Val Trp Cys Ala Val 305 310 320 Gly Glu Gln Glu Leu Arg Lys Cys Asn Gln Trp Ser Gly Leu Ser Glu Gly Ser Val Thr Cys Ser Ser Ala Ser Thr Thr Glu Asp Cys Ile Ala Leu Val Leu Lys Gly Glu Ala Asp Ala Met Ser Leu Asp Gly Gly Tyr Val Tyr Thr Ala Gly Lys Cys Gly Leu Val Pro Val Leu Ala Glu Asn 380 Tyr Lys Ser Gln Gln Ser Ser Asp Pro Asp Pro Asn Cys Val Asp Arg 390 395 385 400 Pro Val Glu Gly Tyr Leu Ala Val Ala Val Val Arg Arg Ser Asp Thr 410 Ser Leu Thr Trp Asn Ser Val Lys Gly Lys Lys Ser Cys His Thr Ala 425 Val Asp Arg Thr Ala Gly Trp Asn Ile Pro Met Gly Leu Leu Phe Asn Gln Thr Gly Ser Cys Lys Phe Asp Glu Tyr Phe Ser Gln Ser Cys Ala Pro Gly Ser Asp Pro Arg Ser Asn Leu Cys Ala Leu Cys Ile Gly Asp 465 470 475 Glu Gln Gly Glu Asn Lys Cys Val Pro Asn Ser Asn Glu Arg Tyr Tyr Gly Tyr Thr Gly Ala Phe Arg Cys Leu Ala Glu Asn Ala Gly Asp Val 505 Ala Phe Val Lys Asp Val Thr Val Leu Gln Asn Thr Asp Gly Asn Asn 515 520 525

Asn Glu Ala Trp Ala Lys Asp Leu Lys Leu Ala Asp Phe Ala Leu Leu 530 535 540

Cys Leu Asp Gly Lys Arg Lys Pro Val Thr Glu Ala Arg Ser Cys His 545 550 555 560

Leu Ala Met Ala Pro Asn His Ala Val Val Ser Arg Met Asp Lys Val 565 570 575

Glu Arg Leu Lys Gln Val Leu Leu His Gln Gln Ala Lys Phe Gly Arg 580 585 590

Asn Gly Ser Asp Cys Pro Asp Lys Phe Cys Leu Phe Gln Ser Glu Thr 595 600 605

Lys Asn Leu Leu Phe Asn Asp Asn Thr Glu Cys Leu Ala Arg Leu His 610 620

Gly Lys Thr Thr Tyr Glu Lys Tyr Leu Gly Pro Gln Tyr Val Ala Gly 625 630 635 640

Ile Thr Asn Leu Lys Lys Cys Ser Thr Ser Pro Leu Leu Glu Ala Cys 645 650 655

Glu Phe Leu Arg Lys Val Pro Pro Leu Val Lys Val Thr His His Val
660 665 670

Thr Ser Ser Val Thr Thr Leu Arg Cys Arg Ala Leu Asn Tyr Tyr Pro 675 680 685

Gln Asn Ile Thr Met Lys Trp Leu Lys Asp Lys Gln Pro Met Asp Ala 690 695 700

Lys Glu Phe Glu Pro Lys Asp Val Leu Pro Asn Gly Asp Gly Thr Tyr 705 710 715 720

Gln Gly Trp Ile Thr Leu Ala Val Pro Pro Gly Glu Glu Gln Arg Tyr 725 730 735

Thr Cys Gln Val Glu His Pro Gly Leu Asp Gln Pro Leu Ile Val Ile 740 745 750

Trp

<210> 5

<211> 275

<212> PRT

<213> Artificial sequence

<220>

<223> Lactoferin / HFE-based recycling domain RC2

<400> 5

Arg Leu Leu Arg Ser His Ser Leu His Tyr Leu Phe Met Gly Ala Ser

1 10 15

Glu Gln Asp Leu Gly Leu Ser Leu Phe Glu Ala Leu Gly Tyr Val Asp 20 25 30

Asp Gln Leu Phe Val Phe Tyr Asp His Glu Ser Arg Arg Val Glu Pro 35 40 45

Arg Thr Pro Trp Val Ser Ser Arg Ile Ser Ser Gln Met Trp Leu Gln 50 55 60

Leu Ser Gln Ser Leu Lys Gly Trp Asp His Met Phe Thr Val Asp Phe 65 70 75 80

Trp Thr Ile Met Glu Asn His Asn His Ser Lys Glu Ser His Thr Leu 85 90 95

Gln Val Ile Leu Gly Cys Glu Met Gln Glu Asp Asn Ser Thr Glu Gly 100 105 110

Tyr Trp Lys Tyr Gly Tyr Asp Gly Gln Asp His Leu Glu Phe Cys Pro 115 120 125

Asp Thr Leu Asp Trp Arg Ala Ala Glu Pro Arg Ala Trp Pro Thr Lys 130 135 140

Leu Glu Trp Glu Arg His Lys Ile Arg Ala Arg Gln Asn Arg Ala Tyr 145 150 155 160

Leu Glu Arg Asp Cys Pro Ala Gln Leu Gln Gln Leu Glu Leu Gly
165 170 175

Arg Gly Val Leu Asp Gln Gln Val Pro Pro Leu Val Lys Val Thr His 180 185 190

His Val Thr Ser Ser Val Thr Thr Leu Arg Cys Arg Ala Leu Asn Tyr 195 200 205

Tyr Pro Gln Asn Ile Thr Met Lys Trp Leu Lys Asp Lys Gln Pro Met 210 215 220

Asp Ala Lys Glu Phe Glu Pro Lys Asp Val Leu Pro Asn Gly Asp Gly 225 230 235 240

Thr Tyr Gln Gly Trp Ile Thr Leu Ala Val Pro Pro Gly Glu Glu Gln 245 250 255

Arg Tyr Thr Cys Gln Val Glu His Pro Gly Leu Asp Gln Pro Leu Ile 260 265 270

Val Ile Trp 275

```
<210> 6
<211>
       753
<212>
      PRT
<213> Artificial sequence
<220>
<223>
       Lactoferin / HFE-based recycling domain RC3
<400> 6
Val Pro Pro Leu Val Lys Val Thr His His Val Thr Ser Ser Val Thr
Thr Leu Arg Cys Arg Ala Leu Asn Tyr Tyr Pro Gln Asn Ile Thr Met
Lys Trp Leu Lys Asp Lys Gln Pro Met Asp Ala Lys Glu Phe Glu Pro
Lys Asp Val Leu Pro Asn Gly Asp Gly Thr Tyr Gln Gly Trp Ile Thr
    50
                        55
Leu Ala Val Pro Pro Gly Glu Glu Gln Arg Tyr Thr Cys Gln Val Glu
His Pro Gly Leu Asp Gln Pro Leu Ile Val Ile Trp Gly Pro Pro Val
Ser Cys Ile Lys Arg Asp Ser Pro Ile Gln Cys Ile Gln Ala Ile Ala
            100
                                                     110
Glu Asn Arg Ala Asp Ala Val Thr Leu Asp Gly Gly Phe Ile Tyr Glu
        115
                            120
Ala Gly Leu Ala Pro Tyr Lys Leu Arg Pro Val Ala Ala Glu Val Tyr
                        135
Gly Thr Glu Arg Gln Pro Arg Thr His Tyr Tyr Ala Val Ala Val Val
145
                    150
                                                             160
Lys Lys Gly Gly Ser Phe Gln Leu Asn Glu Leu Gln Gly Leu Lys Ser
                                    170
Cys His Thr Gly Leu Arg Arg Thr Ala Gly Trp Asn Val Pro Ile Gly
            180
                                185
Thr Leu Arg Pro Phe Leu Asn Trp Thr Gly Pro Pro Glu Pro Ile Glu
        195
Ala Ala Val Ala Arg Phe Phe Ser Ala Ser Cys Val Pro Gly Ala Asp
```

Lys Gly Gln Phe Pro Asn Leu Cys Arg Leu Cys Ala Gly Thr Gly Glu

225					230					235					240
Asn	Lys	Cys	Ala	Phe 245	Ser	Ser	Gln	Glu	Pro 250	Tyr	Phe	Ser	Tyr	Ser 255	Gly
Ala	Phe	Lys	Cys 260	Leu	Arg	Asp	Gly	Ala 265	Gly	Asp	Val	Ala	Phe 270	Ile	Arg
Glu	Ser	Thr 275	Val	Phe	Glu	Asp	Leu 280	Ser	Asp	Glu	Ala	Glu 285	Arg	Asp	Glu
Tyr	Glu 290	Leu	Leu	Cys	Pro	Asp 295	Asn	Thr	Arg	Lys	Pro 300	Val	Asp	Lys	Phe
Lys 305	Asp	Cys	His	Leu	Ala 310	Arg	Val	Pro	Ser	His 315	Ala	Val	Val	Ala	Arg 320
Ser	Val	Asn	Gly	Lys 325	Glu	Asp	Ala	Ile	Trp 330	Asn	Leu	Leu	Arg	Gln 335	Ala
Gln	Glu	Lys	Phe 340	Gly	Lys	Asp	Lys	Ser 345	Pro	Lys	Phe	Gln	Leu 350	Phe	Gly
Ser	Pro	Ser 355	Gly	Gln	Lys	Asp	Leu 360	Leu	Phe	Lys	Asp	Ser 365	Ala	Ile	Gly
Phe	Ser 370	Arg	Val	Pro	Pro	Arg 375	Ile	Asp	Ser	Gly	Leu 380	Tyr	Leu	Gly	Ser
Gly 385	Tyr	Phe	Thr	Ala	Ile 390	Gln	Asn	Leu	Arg	Lys 395	Ser	Glu	Glu	Glu	Val 400
Ala	Ala	Arg	Arg	Ala 405	Arg	Val	Val	Trp	Cys 410	Ala	Val	Gly	Glu	Gln 415	Glu
Leu	Arg	Lys	Cys 420	Asn	Gln	Trp	Ser	Gly 425	Leu	Ser	Glu	Gly	Ser 430	Val	Thr
Cys	Ser	Ser 435	Ala	Ser	Thr	Thr	Glu 440		Cys	Ile	Ala	Leu 445	Val	Leu	Lys
Gly	Glu 450	Ala	Asp	Ala	Met	Ser 455	Leu	Asp	Gly	Gly	Tyr 460	Val	Tyr	Thr	Ala
Gly 465	Lys	Cys	Gly	Leu	Val 470	Pro	Val	Leu	Ala	Glu 475	Asn	Tyr	Lys	Ser	Gln 480
Gln	Ser	Ser	Asp	Pro 485	Asp	Pro	Asn	Cys	Val 490	Asp	Arg	Pro	Val	Glu 495	Gly
Tyr	Leu	Ala	Val 500	Ala	Val	Val	Arg	Arg 505	Ser	Asp	Thr	Ser	Leu 510	Thr	Trp
Asn	Ser	Val 515	Lys	Gly	Lys	Lys	Ser 520	Cys	His	Thr	Ala	Val 525	Asp	Arg	Thr

```
Ala Gly Trp Asn Ile Pro Met Gly Leu Leu Phe Asn Gln Thr Gly Ser
    530
                        535
Cys Lys Phe Asp Glu Tyr Phe Ser Gln Ser Cys Ala Pro Gly Ser Asp
Pro Arg Ser Asn Leu Cys Ala Leu Cys Ile Gly Asp Glu Gln Gly Glu
                565
Asn Lys Cys Val Pro Asn Ser Asn Glu Arg Tyr Tyr Gly Tyr Thr Gly
Ala Phe Arg Cys Leu Ala Glu Asn Ala Gly Asp Val Ala Phe Val Lys
        595
Asp Val Thr Val Leu Gln Asn Thr Asp Gly Asn Asn Asn Glu Ala Trp
Ala Lys Asp Leu Lys Leu Ala Asp Phe Ala Leu Leu Cys Leu Asp Gly
625
                    630
Lys Arg Lys Pro Val Thr Glu Ala Arg Ser Cys His Leu Ala Met Ala
Pro Asn His Ala Val Val Ser Arg Met Asp Lys Val Glu Arg Leu Lys
                                665
Gln Val Leu Leu His Gln Gln Ala Lys Phe Gly Arg Asn Gly Ser Asp
        675
                            680
Cys Pro Asp Lys Phe Cys Leu Phe Gln Ser Glu Thr Lys Asn Leu Leu
                        695
Phe Asn Asp Asn Thr Glu Cys Leu Ala Arg Leu His Gly Lys Thr Thr
705
                                        715
Tyr Glu Lys Tyr Leu Gly Pro Gln Tyr Val Ala Gly Ile Thr Asn Leu
Lys Lys Cys Ser Thr Ser Pro Leu Leu Glu Ala Cys Glu Phe Leu Arg
            740
                                745
                                                     750
Lys
```

<210> 7

<211> 275

<212> PRT

<213> Artificial sequence

<220>

<223> Lactoferin / HFE-based recycling domain RC4

<400> 7

Thr Leu Arg Cys Arg Ala Leu Asn Tyr Tyr Pro Gln Asn Ile Thr Met 20 25 30

Lys Trp Leu Lys Asp Lys Gln Pro Met Asp Ala Lys Glu Phe Glu Pro 35 40 45

Lys Asp Val Leu Pro Asn Gly Asp Gly Thr Tyr Gln Gly Trp Ile Thr 50 55 60

Leu Ala Val Pro Pro Gly Glu Glu Gln Arg Tyr Thr Cys Gln Val Glu 65 70 75 80

His Pro Gly Leu Asp Gln Pro Leu Ile Val Ile Trp Arg Leu Leu Arg 85 90 95

Ser His Ser Leu His Tyr Leu Phe Met Gly Ala Ser Glu Gln Asp Leu 100 105 110

Gly Leu Ser Leu Phe Glu Ala Leu Gly Tyr Val Asp Asp Gln Leu Phe 115 120 125

Val Phe Tyr Asp His Glu Ser Arg Arg Val Glu Pro Arg Thr Pro Trp 130 135 140

Val Ser Ser Arg Ile Ser Ser Gln Met Trp Leu Gln Leu Ser Gln Ser 145 150 155 160

Leu Lys Gly Trp Asp His Met Phe Thr Val Asp Phe Trp Thr Ile Met
165 170 175

Glu Asn His Asn His Ser Lys Glu Ser His Thr Leu Gln Val Ile Leu 180 185 190

Gly Cys Glu Met Gln Glu Asp Asn Ser Thr Glu Gly Tyr Trp Lys Tyr 195 200 205

Gly Tyr Asp Gly Gln Asp His Leu Glu Phe Cys Pro Asp Thr Leu Asp 210 215 220

Trp Arg Ala Ala Glu Pro Arg Ala Trp Pro Thr Lys Leu Glu Trp Glu 225 230 235 240

Arg His Lys Ile Arg Ala Arg Gln Asn Arg Ala Tyr Leu Glu Arg Asp 245 250 255

Cys Pro Ala Gln Leu Gln Gln Leu Leu Glu Leu Gly Arg Gly Val Leu 260 265 270

Asp Gln Gln 275

```
<210> 8
<211> 21
<212> PRT
<213> Mus musculus
<400> 8
Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
Gly Ser Thr Gly Asp
           20
<210> 9
<211> 20
<212> PRT
<213> Homo sapiens
<400> 9
Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Trp Leu Pro
Asp Thr Thr Gly
<210> 10
<211> 301
<212> PRT
<213> Homo sapiens
<400> 10
Ser Lys Leu Lys Asp Pro Glu Leu Ser Leu Lys Gly Thr Gln His Ile
Met Gln Ala Gly Gln Thr Léu His Leu Gln Cys Arg Gly Glu Ala Ala
His Lys Trp Ser Leu Pro Glu Met Val Ser Lys Glu Ser Glu Arg Leu
Ser Ile Thr Lys Ser Ala Cys Gly Arg Asn Gly Lys Gln Phe Cys Ser
                        55
Thr Leu Thr Leu Asn Thr Ala Gln Ala Asn His Thr Gly Phe Tyr Ser
                    70
Cys Lys Tyr Leu Ala Val Pro Thr Ser Lys Lys Glu Thr Glu Ser
                                    90
Ala Ile Tyr Ile Phe Ile Ser Asp Thr Gly Arg Pro Phe Val Glu Met
```

100 105 110 Tyr Ser Glu Ile Pro Glu Ile Ile His Met Thr Glu Gly Arg Glu Leu 115 120 Val Ile Pro Cys Arg Val Thr Ser Pro Asn Ile Thr Val Thr Leu Lys 135 Lys Phe Pro Leu Asp Thr Leu Ile Pro Asp Gly Lys Arg Ile Ile Trp 150 155 Asp Ser Arg Lys Gly Phe Ile Ile Ser Asn Ala Thr Tyr Lys Glu Ile 165 170 Gly Leu Leu Thr Cys Glu Ala Thr Val Asn Gly His Leu Tyr Lys Thr 185 Asn Tyr Leu Thr His Arg Gln Thr Asn Thr Ile Ile Asp Val Gln Ile 195 200 205 Ser Thr Pro Arg Pro Val Lys Leu Leu Arg Gly His Thr Leu Val Leu 215 Asn Cys Thr Ala Thr Thr Pro Leu Asn Thr Arg Val Gln Met Thr Trp 230 235 Ser Tyr Pro Asp Glu Lys Asn Lys Arg Ala Ser Val Arg Arg Arg Ile 245 Asp Gln Ser Asn Ser His Ala Asn Ile Phe Tyr Ser Val Leu Thr Ile Asp Lys Met Gln Asn Lys Asp Lys Gly Leu Tyr Thr Cys Arg Val Arg 275 280 Ser Gly Pro Ser Phe Lys Ser Val Asn Thr Ser Val His 290 295

<210> 11

<211> 1042

<212> PRT

<213> Artificial sequence

<220>

<223> CFP-RC1(n) VEGF

<400> 11

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro 1 5 10 15

Gly Ser Thr Gly Asp Gly Pro Pro Val Ser Cys Ile Lys Arg Asp Ser 20 25 30

- Pro Ile Gln Cys Ile Gln Ala Ile Ala Glu Asn Arg Ala Asp Ala Val 35 40 45
- Thr Leu Asp Gly Gly Phe Ile Tyr Glu Ala Gly Leu Ala Pro Tyr Lys 50 55 60
- Leu Arg Pro Val Ala Ala Glu Val Tyr Gly Thr Glu Arg Gln Pro Arg 65 70 75 80
- Thr His Tyr Tyr Ala Val Ala Val Lys Lys Gly Gly Ser Phe Gln 85 90 95
- Leu Asn Glu Leu Gln Gly Leu Lys Ser Cys His Thr Gly Leu Arg Arg
  100 105 110
- Thr Ala Gly Trp Asn Val Pro Ile Gly Thr Leu Arg Pro Phe Leu Asn 115 120 125
- Trp Thr Gly Pro Pro Glu Pro Ile Glu Ala Ala Val Ala Arg Phe Phe 130 135 140
- Ser Ala Ser Cys Val Pro Gly Ala Asp Lys Gly Gln Phe Pro Asn Leu 145 150 155 160
- Cys Arg Leu Cys Ala Gly Thr Gly Glu Asn Lys Cys Ala Phe Ser Ser 165 170 175
- Gln Glu Pro Tyr Phe Ser Tyr Ser Gly Ala Phe Lys Cys Leu Arg Asp 180 185 190
- Gly Ala Gly Asp Val Ala Phe Ile Arg Glu Ser Thr Val Phe Glu Asp 195 200 205
- Leu Ser Asp Glu Ala Glu Arg Asp Glu Tyr Glu Leu Leu Cys Pro Asp 210 215 220
- Asn Thr Arg Lys Pro Val Asp Lys Phe Lys Asp Cys His Leu Ala Arg 225 230 235 240
- Val Pro Ser His Ala Val Val Ala Arg Ser Val Asn Gly Lys Glu Asp 245 250 255
- Ala Ile Trp Asn Leu Leu Arg Gln Ala Gln Glu Lys Phe Gly Lys Asp 260 265 270
- Lys Ser Pro Lys Phe Gln Leu Phe Gly Ser Pro Ser Gly Gln Lys Asp 275 280 285
- Leu Leu Phe Lys Asp Ser Ala Ile Gly Phe Ser Arg Val Pro Pro Arg 290 295 300
- Ile Asp Ser Gly Leu Tyr Leu Gly Ser Gly Tyr Phe Thr Ala Ile Gln 305 310 315
- Asn Leu Arg Lys Ser Glu Glu Glu Val Ala Ala Arg Arg Ala Arg Val

				325					330					335	
Val	Trp	Cys	Ala 340	Val	Gly	Glu	Gln	Glu 345	Leu	Arg	Lys	Cys	Asn 350	Gln	Trp
Ser	Gly	Leu 355	Ser	Glu	Gly	Ser	Val 360	Thr	Cys	Ser	Ser	Ala 365	Ser	Thr	Thr
Glu	Asp 370	Cys	Ile	Ala	Leu	Val 375	Leu	Lys	Gly	Glu	Ala 380	Asp	Ala	Met	Ser
Leu 385	Asp	Gly	Gly	Tyr	Val 390	Tyr	Thr	Ala	Gly	Lys 395	Cys	Gly	Leu	Val	Pro 400
Val	Leu	Ala	Glu	Asn 405	Tyr	Lys	Ser	Gln	Gln 410	Ser	Ser	Asp	Pro	Asp 415	Pro
Asn	Cys	Val	Asp 420	Arg	Pro	Val	Glu	Gly 425	Tyr	Leu	Ala	Val	Ala 430	Val	Val
Arg	Arg	Ser 435	Asp	Thr	Ser	Leu	Thr 440	Trp	Asn	Ser	Val	Lys 445	Gly	Lys	Lys
Ser	Cys 450	His	Thr	Ala	Val	Asp 455	Arg	Thr	Ala	Gly	Trp 460	Asn	Ile	Pro	Met
Gly 465	Leu	Leu	Phe	Asn	Gln 470	Thr	Gly	Ser	Cys	Lys 475	Phe	Asp	Glu	Tyr	Phe 480
Ser	Gln	Ser	Cys	Ala 485	Pro	Gly	Ser	Asp	Pro 490	Arg	Ser	Asn	Leu	Cys 495	Ala
Leu	Cys	Ile	Gly 500	Asp	Glu	Gln	Gly	Glu 505	Asn	Lys	Cys	Val	Pro 510	Asn	Ser
Asn	Glu	Arg 515	Tyr	Tyr	Gly	Tyr	Thr 520	Gly	Ala	Phe	Arg	Cys 525	Leu	Ala	Glu
Asn	Ala 530	Gly	Asp	Val	Ala	Phe 535	Val	Lys	Asp	Val	Thr 540	Val	Leu	Gln	Asn
Thr 545	Asp	Gly	Asn	Asn	Asn 550	Glu	Ala	Trp	Ala	Lys 555	Asp	Leu	Lys	Leu	Ala 560
Asp	Phe	Ala	Leu	Leu 565	Cys	Leu	Asp	Gly	Lys 570	Arg	Lys	Pro	Val	Thr 575	Glu
Ala	Arg	Ser	Cys 580	His	Leu	Ala	Met	Ala 585	Pro	Asn	His	Ala	Val 590	Val	Ser
Arg	Met	Asp 595	Lys	Val	Glu	Arg	Leu 600	Lys	Gln	Val	Leu	Leu 605	His	Gln	Gln
Ala	Lys 610	Phe	Gly	Arg	Asn	Gly 615	Ser	Asp	Cys	Pro	Asp 620	Lys	Phe	Cys	Leu

Phe 625	Gln	Ser	Glu	Thr	Lys 630	Asn	Leu	Leu	Phe	635	Asp	Asn	Thr	GIU	640
Leu	Ala	Arg	Leu	His 645	Gly	Lys	Thr	Thr	Tyr 650	Glu	Lys	Tyr	Leu	Gly 655	Pro
Gln	Tyr	Val	Ala 660	Gly	Ile	Thr	Asn	Leu 665	Lys	Lys	Cys	Ser	Thr 670	Ser	Pro
Leu	Leu	Glu 675	Ala	Cys	Glu	Phe	Leu 680	Arg	Lys	Val	Pro	Pro 685	Leu	Val	Lys
Val	Thr 690	His	His	Val	Thr	Ser 695	Ser	Val	Thr	Thr	Leu 700	Arg	Cys	Arg	Ala
Leu 705	Asn	Tyr	Tyr	Pro	Gln 710	Asn	Ile	Thr	Met	Lys 715	Trp	Leu	Lys	Asp	Lys 720
Gln	Pro	Met	Asp	Ala 725	Lys	Glu	Phe	Glu	Pro 730	Lys	Asp	Val	Leu	Pro 735	Asn
Gly	Asp	Gly	Thr 740	Tyr	Ser	Lys	Leu	Lys 745	Asp	Pro	Glu	Leu	Ser 750	Leu	Lys
Gly	Thr	Gln 755	His	Ile	Met	Gln	Ala 760	Gly	Gln	Thr	Leu	His 765	Leu	Gln	Cys
Arg	Gly 770	Glu	Ala	Ala	His	Lys 775	Trp	Ser	Leu	Pro	Glu 780	Met	Val	Ser	Lys
Glu 785	Ser	Glu	Arg	Leu	Ser 790	Ile	Thr	Lys	Ser	Ala 795	Cys	Gly	Arg	Asn	Gly 800
Lys	Gln	Phe	Cys	Ser 805	Thr	Leu	Thr	Leu	Asn 810	Thr	Ala	Gln	Ala	Asn 815	His
Thr	Gly	Phe	Tyr 820	Ser	Cys	Lys	Tyr	Leu 825	Ala	Val	Pro	Thr	Ser 830	Lys	Lys
Lys	Glu	Thr 835		Ser	Ala	Ile	Tyr 840		Phe	Ile	Ser	Asp 845		Gly	Arg
Pro	Phe 850		Glu	Met	Tyr	Ser 855		Ile	Pro	Glu	11e 860		His	Met	Thr
Glu 865	ı Gly	Arg	Glu	Leu	Val 870		Pro	Cys	Arg	Val 875		Ser	Pro	Asn	Ile 880
Thi	val	Thr	Leu	Lys 885		Phe	Pro	Leu	. Asp 890		Leu	Ile	Pro	Asp 895	
Lys	s Arg	Ile	Ile	_	Asp	Ser	Arg	Lys		Phe	· Ile	· Ile	Ser		Ala

Thr Tyr Lys Glu Ile Gly Leu Leu Thr Cys Glu Ala Thr Val Asn Gly 915 920 925

His Leu Tyr Lys Thr Asn Tyr Leu Thr His Arg Gln Thr Asn Thr Ile 930 935 940

Ile Asp Val Gln Ile Ser Thr Pro Arg Pro Val Lys Leu Leu Arg Gly 945 950 955 960

His Thr Leu Val Leu Asn Cys Thr Ala Thr Thr Pro Leu Asn Thr Arg
965 970 975

Val Gln Met Thr Trp Ser Tyr Pro Asp Glu Lys Asn Lys Arg Ala Ser 980 985 990

Val Arg Arg Ile Asp Gln Ser Asn Ser His Ala Asn Ile Phe Tyr 995 1000 1005

Ser Val Leu Thr Ile Asp Lys Met Gln Asn Lys Asp Lys Gly Leu 1010 1015 1020

Tyr Thr Cys Arg Val Arg Ser Gly Pro Ser Phe Lys Ser Val Asn 1025 1030 1035

Thr Ser Val His 1040

<210> 12

<211> 597

<212> PRT

<213> Artificial sequence

<220>

<223> CFP-RC2(n)VEGF

<400> 12

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro 1 5 10 15

Gly Ser Thr Gly Asp Arg Leu Leu Arg Ser His Ser Leu His Tyr Leu 20 25 30

Phe Met Gly Ala Ser Glu Gln Asp Leu Gly Leu Ser Leu Phe Glu Ala 35 40 45

Leu Gly Tyr Val Asp Asp Gln Leu Phe Val Phe Tyr Asp His Glu Ser 50 55 60

Arg Arg Val Glu Pro Arg Thr Pro Trp Val Ser Ser Arg Ile Ser Ser 65 70 75 80

Gln Met Trp Leu Gln Leu Ser Gln Ser Leu Lys Gly Trp Asp His Met 85 90 95

- Phe Thr Val Asp Phe Trp Thr Ile Met Glu Asn His Asn His Ser Lys 100 105 110
- Glu Ser His Thr Leu Gl<br/>n Val Ile Leu Gly Cys Glu Met Gl<br/>n Glu Asp\$115\$120 \$125\$
- Asn Ser Thr Glu Gly Tyr Trp Lys Tyr Gly Tyr Asp Gly Gln Asp His 130 135 140
- Leu Glu Phe Cys Pro Asp Thr Leu Asp Trp Arg Ala Ala Glu Pro Arg 145 150 155 160
- Ala Trp Pro Thr Lys Leu Glu Trp Glu Arg His Lys Ile Arg Ala Arg
  165 170 175
- Gln Asn Arg Ala Tyr Leu Glu Arg Asp Cys Pro Ala Gln Leu Gln Gln 180 185 190
- Leu Leu Glu Leu Gly Arg Gly Val Leu Asp Gln Gln Val Pro Pro Leu 195 200 205
- Val Lys Val Thr His His Val Thr Ser Ser Val Thr Thr Leu Arg Cys 210 220
- Arg Ala Leu Asn Tyr Tyr Pro Gln Asn Ile Thr Met Lys Trp Leu Lys 225 230 235 240
- Asp Lys Gln Pro Met Asp Ala Lys Glu Phe Glu Pro Lys Asp Val Leu 245 250 255
- Pro Asn Gly Asp Gly Thr Tyr Gln Gly Trp Ile Thr Leu Ala Val Pro 260 265 270
- Pro Gly Glu Glu Gln Arg Tyr Thr Cys Gln Val Glu His Pro Gly Leu 275 280 285
- Asp Gln Pro Leu Ile Val Ile Trp Ser Lys Leu Lys Asp Pro Glu Leu 290 295 300
- Ser Leu Lys Gly Thr Gln His Ile Met Gln Ala Gly Gln Thr Leu His 305 310 315 320
- Leu Gln Cys Arg Gly Glu Ala Ala His Lys Trp Ser Leu Pro Glu Met 325 330 335
- Val Ser Lys Glu Ser Glu Arg Leu Ser Ile Thr Lys Ser Ala Cys Gly 340 345 350
- Arg Asn Gly Lys Gln Phe Cys Ser Thr Leu Thr Leu Asn Thr Ala Gln 355 360 365
- Ala Asn His Thr Gly Phe Tyr Ser Cys Lys Tyr Leu Ala Val Pro Thr 370 375 380

Ser Lys Lys Glu Thr Glu Ser Ala Ile Tyr Ile Phe Ile Ser Asp 390 395 385 Thr Gly Arg Pro Phe Val Glu Met Tyr Ser Glu Ile Pro Glu Ile Ile 410 His Met Thr Glu Gly Arg Glu Leu Val Ile Pro Cys Arg Val Thr Ser Pro Asn Ile Thr Val Thr Leu Lys Lys Phe Pro Leu Asp Thr Leu Ile 440 Pro Asp Gly Lys Arg Ile Ile Trp Asp Ser Arg Lys Gly Phe Ile Ile Ser Asn Ala Thr Tyr Lys Glu Ile Gly Leu Leu Thr Cys Glu Ala Thr 470 Val Asn Gly His Leu Tyr Lys Thr Asn Tyr Leu Thr His Arg Gln Thr 490 Asn Thr Ile Ile Asp Val Gln Ile Ser Thr Pro Arg Pro Val Lys Leu 505 Leu Arg Gly His Thr Leu Val Leu Asn Cys Thr Ala Thr Thr Pro Leu 515 520 Asn Thr Arg Val Gln Met Thr Trp Ser Tyr Pro Asp Glu Lys Asn Lys 535 Arg Ala Ser Val Arg Arg Ile Asp Gln Ser Asn Ser His Ala Asn 545 550 555 Ile Phe Tyr Ser Val Leu Thr Ile Asp Lys Met Gln Asn Lys Asp Lys 565 570 Gly Leu Tyr Thr Cys Arg Val Arg Ser Gly Pro Ser Phe Lys Ser Val 585 Asn Thr Ser Val His 595 <210> 13 <211> 1042 <212> PRT <213> Artificial sequence <220> <223> CFP-RC1(c) VEGF

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro

10

<400> 13

- Gly Ser Thr Gly Asp Ser Lys Leu Lys Asp Pro Glu Leu Ser Leu Lys 20 25 30
- Gly Thr Gln His Ile Met Gln Ala Gly Gln Thr Leu His Leu Gln Cys  $35 \hspace{1cm} 40 \hspace{1cm} 45$
- Arg Gly Glu Ala Ala His Lys Trp Ser Leu Pro Glu Met Val Ser Lys 50 55 60
- Glu Ser Glu Arg Leu Ser Ile Thr Lys Ser Ala Cys Gly Arg Asn Gly 65 70 75 80
- Lys Gln Phe Cys Ser Thr Leu Thr Leu Asn Thr Ala Gln Ala Asn His
  85 90 95
- Thr Gly Phe Tyr Ser Cys Lys Tyr Leu Ala Val Pro Thr Ser Lys Lys 100 105 110
- Lys Glu Thr Glu Ser Ala Ile Tyr Ile Phe Ile Ser Asp Thr Gly Arg 115 120 125
- Pro Phe Val Glu Met Tyr Ser Glu Ile Pro Glu Ile Ile His Met Thr 130 135 140
- Glu Gly Arg Glu Leu Val Ile Pro Cys Arg Val Thr Ser Pro Asn Ile 145 150 155 160
- Thr Val Thr Leu Lys Lys Phe Pro Leu Asp Thr Leu Ile Pro Asp Gly 165 170 175
- Lys Arg Ile Ile Trp Asp Ser Arg Lys Gly Phe Ile Ile Ser Asn Ala 180 185 190
- Thr Tyr Lys Glu Ile Gly Leu Leu Thr Cys Glu Ala Thr Val Asn Gly 195 200 205
- His Leu Tyr Lys Thr Asn Tyr Leu Thr His Arg Gln Thr Asn Thr Ile 210 215 220
- Ile Asp Val Gln Ile Ser Thr Pro Arg Pro Val Lys Leu Leu Arg Gly 225 230 235 240
- His Thr Leu Val Leu Asn Cys Thr Ala Thr Thr Pro Leu Asn Thr Arg 245 250 255
- Val Gln Met Thr Trp Ser Tyr Pro Asp Glu Lys Asn Lys Arg Ala Ser 260 265 270
- Val Arg Arg Ile Asp Gln Ser Asn Ser His Ala Asn Ile Phe Tyr 275 280 285
- Ser Val Leu Thr Ile Asp Lys Met Gln Asn Lys Asp Lys Gly Leu Tyr 290 295 300

7

Thr Cys Arg Val Arg Ser Gly Pro Ser Phe Lys Ser Val Asn Thr Ser 315 Val His Gly Pro Pro Val Ser Cys Ile Lys Arg Asp Ser Pro Ile Gln Cys Ile Gln Ala Ile Ala Glu Asn Arg Ala Asp Ala Val Thr Leu Asp 340 Gly Gly Phe Ile Tyr Glu Ala Gly Leu Ala Pro Tyr Lys Leu Arg Pro Val Ala Ala Glu Val Tyr Gly Thr Glu Arg Gln Pro Arg Thr His Tyr Tyr Ala Val Ala Val Lys Lys Gly Gly Ser Phe Gln Leu Asn Glu 400 Leu Gln Gly Leu Lys Ser Cys His Thr Gly Leu Arg Arg Thr Ala Gly Trp Asn Val Pro Ile Gly Thr Leu Arg Pro Phe Leu Asn Trp Thr Gly Pro Pro Glu Pro Ile Glu Ala Ala Val Ala Arg Phe Phe Ser Ala Ser 435 Cys Val Pro Gly Ala Asp Lys Gly Gln Phe Pro Asn Leu Cys Arg Leu Cys Ala Gly Thr Gly Glu Asn Lys Cys Ala Phe Ser Ser Gln Glu Pro 475 Tyr Phe Ser Tyr Ser Gly Ala Phe Lys Cys Leu Arg Asp Gly Ala Gly Asp Val Ala Phe Ile Arg Glu Ser Thr Val Phe Glu Asp Leu Ser Asp 505 Glu Ala Glu Arg Asp Glu Tyr Glu Leu Leu Cys Pro Asp Asn Thr Arg 515 Lys Pro Val Asp Lys Phe Lys Asp Cys His Leu Ala Arg Val Pro Ser His Ala Val Val Ala Arg Ser Val Asn Gly Lys Glu Asp Ala Ile Trp 545 Asn Leu Leu Arg Gln Ala Gln Glu Lys Phe Gly Lys Asp Lys Ser Pro Lys Phe Gln Leu Phe Gly Ser Pro Ser Gly Gln Lys Asp Leu Leu Phe 585 Lys Asp Ser Ala Ile Gly Phe Ser Arg Val Pro Pro Arg Ile Asp Ser

		595					600					605			
Gly	Leu 610	Tyr	Leu	Gly	Ser	Gly 615	Tyr	Phe	Thr	Ala	Ile 620	Gln	Asn	Leu	Arg
Lys 625	Ser	Glu	Glu	Glu	Val 630	Ala	Ala	Arg	Arg	Ala 635	Arg	Val	Val	Trp	Cys 640
Ala	Val	Gly	Glu	Gln 645	Glu	Leu	Arg	Lys	Cys 650	Asn	Gln	Trp	Ser	Gly 655	Leu
Ser	Glu	Gly	Ser 660	Val	Thr	Cys	Ser	Ser 665	Ala	Ser	Thr	Thr	Glu 670	Asp	Cys
Ile	Ala	Leu 675	Val	Leu	Lys	Gly	Glu 680	Ala	Asp	Ala	Met	Ser 685	Leu	Asp	Gly
Gly	Tyr 690	Val	Tyr	Thr	Ala	Gly 695	Lys	Cys	Gly	Leu	Val 700	Pro	Val	Leu	Ala
Glu 705	Asn	Tyr	Lys	Ser	Gln 710	Gln	Ser	Ser	Asp	Pro 715	Asp	Pro	Asn	Cys	Val 720
Asp	Arg	Pro	Val	Glu 725	Gly	Tyr	Leu	Ala	Val 730	Ala	Val	Val	Arg	Arg 735	Ser
Asp	Thr	Ser	Leu 740	Thr	Trp	Asn	Ser	Val 745	Lys	Gly	Lys	Lys	Ser 750	Cys	His
Thr	Ala	Val 755	Asp	Arg	Thr	Ala	Gly 760	Trp	Asn	Ile	Pro	Met 765	Gly	Leu	Leu
Phe	Asn 770	Gln	Thr	Gly	Ser	Cys 775	Lys	Phe	Asp	Glu	Tyr 780	Phe	Ser	Gln	Ser
Cys 785	Ala	Pro	Gly	Ser	Asp 790	Pro	Arg	Ser	Asn	Leu 795	Cys	Ala	Leu	Суз	Ile 800
Gly	Asp	Glu		Gly 805		Asn	Lys		Val 810		Asn	Ser	Asn	Glu 815	
Tyr	Tyr	Gly	Tyr 820	Thr	Gly	Ala	Phe	Arg 825	Cys	Leu	Ala	Glu	Asn 830	Ala	Gly
Asp	Val	Ala 835	Phe	Val	Lys	Asp	Val 840	Thr	Val	Leu	Gln	Asn 845	Thr	Asp	Gly
Asn	Asn 850	Asn	Glu	Ala	Trp	Ala 855	Lys	Asp	Leu	Lys	Leu 860	Ala	Asp	Phe	Ala
Leu 865	Leu	Cys	Leu	Asp	Gly 870	Lys	Arg	Lys	Pro	Val 875	Thr	Glu	Ala	Arg	Ser 880
Cys	His	Leu	Ala	Met 885	Ala	Pro	Asn	His	Ala 890		Val	Ser	Arg	Met 895	Asp

Lys Val Glu Arg Leu Lys Gln Val Leu Leu His Gln Gln Ala Lys Phe 900 905 910

Gly Arg Asn Gly Ser Asp Cys Pro Asp Lys Phe Cys Leu Phe Gln Ser 915 920 925

Glu Thr Lys Asn Leu Leu Phe Asn Asp Asn Thr Glu Cys Leu Ala Arg 930 935 940

Leu His Gly Lys Thr Thr Tyr Glu Lys Tyr Leu Gly Pro Gln Tyr Val 945 950 955 960

Ala Gly Ile Thr Asn Leu Lys Lys Cys Ser Thr Ser Pro Leu Leu Glu 965 970 975

Ala Cys Glu Phe Leu Arg Lys Val Pro Pro Leu Val Lys Val Thr His 980 985 990

His Val Thr Ser Ser Val Thr Thr Leu Arg Cys Arg Ala Leu Asn Tyr 995 1000 1005

Tyr Pro Gln Asn Ile Thr Met Lys Trp Leu Lys Asp Lys Gln Pro 1010 1015 1020

Met Asp Ala Lys Glu Phe Glu Pro Lys Asp Val Leu Pro Asn Gly 1025 1030 1035

Asp Gly Thr Tyr 1040

<210> 14

<211> 597

<212> PRT

<213> Artificial sequence

<220>

<223> CFP-RC2(c)VEGF

<400> 14

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro 1 5 10 15

Gly Ser Thr Gly Asp Ser Lys Leu Lys Asp Pro Glu Leu Ser Leu Lys 20 25 30

Gly Thr Gln His Ile Met Gln Ala Gly Gln Thr Leu His Leu Gln Cys 35 40 45

Arg Gly Glu Ala Ala His Lys Trp Ser Leu Pro Glu Met Val Ser Lys 50 55 60

Glu Ser Glu Arg Leu Ser Ile Thr Lys Ser Ala Cys Gly Arg Asn Gly

65					70					75					80
Lys	Gln	Phe	Cys	Ser 85	Thr	Leu	Thr	Leu	Asn 90	Thr	Ala	Gln	Ala	Asn 95	His
Thr	Gly	Phe	Tyr 100	Ser	Cys	Lys	Tyr	Leu 105	Ala	Val	Pro	Thr	Ser 110	Lys	Lys
Lys	Glu	Thr 115	Glu	Ser	Ala	Ile	Tyr 120	Ile	Phe	Ile	Ser	Asp 125	Thr	Gly	Arg
Pro	Phe 130	Val	Glu	Met	Tyr	Ser 135	Glu	Ile	Pro	Glu	Ile 140	Ile	His	Met	Thr
Glu 145	Gly	Arg	Glu	Leu	Val 150	Ile	Pro	Cys	Arg	Val 155	Thr	Ser	Pro	Asn	Ile 160
Thr	Val	Thr	Leu	Lys 165	Lys	Phe	Pro	Leu	Asp 170	Thr	Leu	Ile	Pro	Asp 175	Gly
Lys	Arg	Ile	Ile 180	Trp	Asp	Ser	Arg	Lys 185	Gly	Phe	Ile	Ile	Ser 190	Asn	Ala
Thr	Tyr	Lys 195	Glu	Ile	Gly	Leu	Leu 200	Thr	Cys	Glu	Ala	Thr 205	Val	Asn	Gly
His	Leu 210	Tyr	Lys	Thr	Asn	Tyr 215	Leu	Thr	His	Arg	Gln 220	Thr	Asn	Thr	Ile
Ile 225	Asp	Val	Gln	Ile	Ser 230	Thr	Pro	Arg	Pro	Val 235	Lys	Leu	Leu	Arg	Gly 240
His	Thr	Leu	Val	Leu 245	Asn	Cys	Thr	Ala	Thr 250	Thr	Pro	Leu	Asn	Thr 255	Arg
Val	Gln	Met	Thr 260	Trp	Ser	Tyr	Pro	Asp 265	Glu	Lys	Asn	Lys	Arg 270	Ala	Ser
Val	Arg	Arg 275	Arg	Ile	Asp	Gln	Ser 280		Ser	His	Ala	Asn 285	Ile	Phe	Tyr
Ser	Val 290	Leu	Thr	Ile	Asp	Lys 295	Met	Gln	Asn	Lys	Asp 300	Lys	Gly	Leu	Tyr
Thr 305	Cys	Arg	Val	Arg	Ser 310	Gly	Pro	Ser	Phe	Lys 315	Ser	Val	Asn	Thr	Ser 320
Val	His	Arg	Leu	Leu 325	Arg	Ser	His	Ser	Leu 330		Tyr	Leu	Phe	Met 335	Gl
Ala	Ser	Glu	Gln 340	-	Leu	Gly	Leu	Ser 345		Phe	Glu	Ala	Leu 350	Gly	Туі
Val	Asp	Asp 355		Leu	Phe	Val	Phe 360		Asp	His	Glu	Ser 365	_	Arg	Val

Glu Pro Arg Thr Pro Trp Val Ser Ser Arg Ile Ser Ser Gln Met Trp 370 375 380

Leu Gln Leu Ser Gln Ser Leu Lys Gly Trp Asp His Met Phe Thr Val 385 390 395 400

Asp Phe Trp Thr Ile Met Glu Asn His Asn His Ser Lys Glu Ser His 405 410 415

Thr Leu Gln Val Ile Leu Gly Cys Glu Met Gln Glu Asp Asn Ser Thr
420 425 430

Glu Gly Tyr Trp Lys Tyr Gly Tyr Asp Gly Gln Asp His Leu Glu Phe
435 440 445

Cys Pro Asp Thr Leu Asp Trp Arg Ala Ala Glu Pro Arg Ala Trp Pro 450 455 460

Thr Lys Leu Glu Trp Glu Arg His Lys Ile Arg Ala Arg Gln Asn Arg 465 470 475 480

Ala Tyr Leu Glu Arg Asp Cys Pro Ala Gln Leu Gln Gln Leu Glu 485 490 495

Leu Gly Arg Gly Val Leu Asp Gln Gln Val Pro Pro Leu Val Lys Val 500 505 510

Thr His His Val Thr Ser Ser Val Thr Thr Leu Arg Cys Arg Ala Leu 515 520 525

Asn Tyr Tyr Pro Gln Asn Ile Thr Met Lys Trp Leu Lys Asp Lys Gln 530 540

Pro Met Asp Ala Lys Glu Phe Glu Pro Lys Asp Val Leu Pro Asn Gly 545 550 555 560

Asp Gly Thr Tyr Gln Gly Trp Ile Thr Leu Ala Val Pro Pro Gly Glu 565 570 575

Glu Gln Arg Tyr Thr Cys Gln Val Glu His Pro Gly Leu Asp Gln Pro 580 585 590

Leu Ile Val Ile Trp 595

<210> 15

<211> 251

<212> PRT

<213> Homo sapiens

<400> 15

Asp Ser Val Cys Pro Gln Gly Lys Tyr Ile His Pro Gln Asn Asn Ser

```
1
                                    10
                                                        15
Ile Cys Cys Thr Lys Cys His Lys Gly Thr Tyr Leu Tyr Asn Asp Cys
Pro Gly Pro Gly Gln Asp Thr Asp Cys Arg Glu Cys Glu Ser Gly Ser
Phe Thr Ala Ser Glu Asn His Leu Arg His Cys Leu Ser Cys Ser Lys
                        55
Cys Arg Lys Glu Met Gly Gln Val Glu Ile Ser Ser Cys Thr Val Asp
Arg Asp Thr Val Cys Gly Cys Arg Lys Asn Gln Tyr Arg His Tyr Trp
Ser Glu Asn Leu Phe Gln Cys Phe Asn Cys Ser Leu Cys Leu Asn Gly
Thr Val His Leu Ser Cys Gln Glu Lys Gln Asn Thr Val Cys Thr Cys
His Ala Gly Phe Phe Leu Arg Glu Asn Glu Cys Val Ser Cys Ser Asn
Cys Lys Lys Ser Leu Glu Cys Thr Lys Leu Cys Leu Pro Gln Ile Glu
145
                    150
Asn Val Lys Gly Thr Glu Asp Ser Gly Thr Thr Val Leu Leu Pro Leu
Val Ile Phe Phe Gly Leu Cys Leu Leu Ser Leu Leu Phe Ile Gly Leu
            180
                                185
Met Tyr Arg Tyr Gln Arg Trp Lys Ser Lys Leu Tyr Ser Ile Val Cys
Gly Lys Ser Thr Pro Glu Lys Glu Gly Glu Leu Glu Gly Thr Thr
                       215
Lys Pro Leu Ala Pro Asn Pro Ser Phe Ser Pro Thr Pro Gly Phe Thr
225
                                        235
Pro Thr Leu Gly Phe Ser Pro Val Pro Ser Ser
               245
                                    250
```

```
<210> 16
```

<sup>&</sup>lt;211> 992

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Artificial sequence

<sup>&</sup>lt;220>

<sup>&</sup>lt;223> CFP-RC1(n)TNF

<400> 16

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro 1 5 10 15

Gly Ser Thr Gly Asp Gly Pro Pro Val Ser Cys Ile Lys Arg Asp Ser 20 25 30

Pro Ile Gln Cys Ile Gln Ala Ile Ala Glu Asn Arg Ala Asp Ala Val 35 40 45

Thr Leu Asp Gly Gly Phe Ile Tyr Glu Ala Gly Leu Ala Pro Tyr Lys 50 55 60

Leu Arg Pro Val Ala Ala Glu Val Tyr Gly Thr Glu Arg Gln Pro Arg 65 70 75 80

Thr His Tyr Tyr Ala Val Ala Val Lys Lys Gly Gly Ser Phe Gln 85 90 95

Leu Asn Glu Leu Gln Gly Leu Lys Ser Cys His Thr Gly Leu Arg Arg 100 105 110

Thr Ala Gly Trp Asn Val Pro Ile Gly Thr Leu Arg Pro Phe Leu Asn 115 120 125

Trp Thr Gly Pro Pro Glu Pro Ile Glu Ala Ala Val Ala Arg Phe Phe 130 135 140

Ser Ala Ser Cys Val Pro Gly Ala Asp Lys Gly Gln Phe Pro Asn Leu 145 150 155 160

Cys Arg Leu Cys Ala Gly Thr Gly Glu Asn Lys Cys Ala Phe Ser Ser 165 170 175

Gln Glu Pro Tyr Phe Ser Tyr Ser Gly Ala Phe Lys Cys Leu Arg Asp 180 185 190

Gly Ala Gly Asp Val Ala Phe Ile Arg Glu Ser Thr Val Phe Glu Asp 195 200 205

Leu Ser Asp Glu Ala Glu Arg Asp Glu Tyr Glu Leu Leu Cys Pro Asp 210 215 220

Asn Thr Arg Lys Pro Val Asp Lys Phe Lys Asp Cys His Leu Ala Arg 225 230 235 240

Val Pro Ser His Ala Val Val Ala Arg Ser Val Asn Gly Lys Glu Asp
245 250 255

Ala Ile Trp Asn Leu Leu Arg Gln Ala Gln Glu Lys Phe Gly Lys Asp 260 265 270

Lys Ser Pro Lys Phe Gln Leu Phe Gly Ser Pro Ser Gly Gln Lys Asp

280 285 275 Leu Leu Phe Lys Asp Ser Ala Ile Gly Phe Ser Arg Val Pro Pro Arg 290 295 Ile Asp Ser Gly Leu Tyr Leu Gly Ser Gly Tyr Phe Thr Ala Ile Gln 310 Asn Leu Arg Lys Ser Glu Glu Glu Val Ala Ala Arg Arg Ala Arg Val 330 Val Trp Cys Ala Val Gly Glu Glu Leu Arg Lys Cys Asn Gln Trp 345 Ser Gly Leu Ser Glu Gly Ser Val Thr Cys Ser Ser Ala Ser Thr Thr 360 Glu Asp Cys Ile Ala Leu Val Leu Lys Gly Glu Ala Asp Ala Met Ser 375 370 Leu Asp Gly Gly Tyr Val Tyr Thr Ala Gly Lys Cys Gly Leu Val Pro 390 Val Leu Ala Glu Asn Tyr Lys Ser Gln Gln Ser Ser Asp Pro Asp Pro 410 Asn Cys Val Asp Arg Pro Val Glu Gly Tyr Leu Ala Val Ala Val Val 420 Arg Arg Ser Asp Thr Ser Leu Thr Trp Asn Ser Val Lys Gly Lys Lys 440 Ser Cys His Thr Ala Val Asp Arg Thr Ala Gly Trp Asn Ile Pro Met 460 Gly Leu Leu Phe Asn Gln Thr Gly Ser Cys Lys Phe Asp Glu Tyr Phe Ser Gln Ser Cys Ala Pro Gly Ser Asp Pro Arg Ser Asn Leu Cys Ala 490 Leu Cys Ile Gly Asp Glu Gln Gly Glu Asn Lys Cys Val Pro Asn Ser Asn Glu Arg Tyr Tyr Gly Tyr Thr Gly Ala Phe Arg Cys Leu Ala Glu 520 Asn Ala Gly Asp Val Ala Phe Val Lys Asp Val Thr Val Leu Gln Asn 535 Thr Asp Gly Asn Asn Asn Glu Ala Trp Ala Lys Asp Leu Lys Leu Ala 545 550 Asp Phe Ala Leu Leu Cys Leu Asp Gly Lys Arg Lys Pro Val Thr Glu 565 570

Ala	Arg	Ser	Cys 580	His	Leu	Ala	Met	Ala 585	Pro	Asn	His	Ala	Val 590	Val	Ser
Arg	Met	Asp 595	Lys	Val	Glu	Arg	Leu 600	Lys	Gln	Val	Leu	Leu 605	His	Gln	Gln
Ala	Lys 610	Phe	Gly	Arg	Asn	Gly 615	Ser	Asp	Cys	Pro	Asp 620	Lys	Phe	Cys	Leu
Phe 625	Gln	Ser	Glu	Thr	Lys 630	Asn	Leu	Leu	Phe	Asn 635	Asp	Asn	Thr	Glu	Cys 640
Leu	Ala	Arg	Leu	His 645	Gly	Lys	Thr	Thr	Tyr 650	Glu	Lys	Tyr	Leu	Gly 655	Pro
Gln	Tyr	Val	Ala 660	Gly	Ile	Thr	Asn	Leu 665	Lys	Lys	Cys	Ser	Thr 670	Ser	Pro
Leu	Leu	Glu 675	Ala	Cys	Glu	Phe	Leu 680	Arg	Lys	Val	Pro	Pro 685	Leu	Val	Lys
Val	Thr 690	His	His	Val	Thr	Ser 695	Ser	Val	Thr	Thr	Leu 700	Arg	Cys	Arg	Ala
Leu 705	Asn	Tyr	Tyr	Pro	Gln 710	Asn	Ile	Thr	Met	Lys 715	Trp	Leu	Lys	Asp	Lys 720
Gln	Pro	Met	Asp	Ala 725	Lys	Glu	Phe	Glu	Pro 730	Lys	Asp	Val	Leu	Pro 735	Asn
Gly	Asp	Gly	Thr 740	Tyr	Asp	Ser	Val	Cys 745	Pro	Gln	Gly	Lys	Tyr 750	Ile	His
Pro	Gln	Asn 755	Asn	Ser	Ile	Cys	Cys 760	Thr	Lys	Cys	His	Lys 765	Gly	Thr	Tyr
Leu	Tyr 770	Asn	Asp	Cys	Pro	Gly 775	Pro	Gly	Gln	Asp	Thr 780	Asp	Суѕ	Arg	Glu
Cys 785	Glu	Ser	Gly	Ser	Phe 790	Thr	Ala	Ser	Glu	Asn 795	His	Leu	Arg	His	Cys 800
Leu	Ser	Cys	Ser	Lys 805	Cys	Arg	Lys	Glu	Met 810	Gly	Gln	Val	Glu	Ile 815	Ser
Ser	Cys	Thr	Val 820	Asp	Arg	Asp	Thr	Val 825	Cys	Gly	Cys	Arg	Lys 830	Asn	Gln
Tyr	Arg	His 835	Tyr	Trp	Ser	Glu	Asn 840	Leu	Phe	Gln	Cys	Phe 845	Asn	Cys	Ser
Leu	Cys 850	Leu	Asn	Gly	Thr	Val 855	His	Leu	Ser	Cys	Gln 860	Glu	Lys	Gln	Asn

Thr Val Cys Thr Cys His Ala Gly Phe Phe Leu Arg Glu Asn Glu Cys 865 870 875 880

31

Val Ser Cys Ser Asn Cys Lys Lys Ser Leu Glu Cys Thr Lys Leu Cys 885 890 895

Leu Pro Gln Ile Glu Asn Val Lys Gly Thr Glu Asp Ser Gly Thr Thr 900 905 910

Val Leu Pro Leu Val Ile Phe Phe Gly Leu Cys Leu Leu Ser Leu 915 920 925

Leu Phe Ile Gly Leu Met Tyr Arg Tyr Gln Arg Trp Lys Ser Lys Leu 930 935 940

Tyr Ser Ile Val Cys Gly Lys Ser Thr Pro Glu Lys Glu Gly Glu Leu 945 950 955 960

Glu Gly Thr Thr Lys Pro Leu Ala Pro Asn Pro Ser Phe Ser Pro 965 970 975

Thr Pro Gly Phe Thr Pro Thr Leu Gly Phe Ser Pro Val Pro Ser Ser 980 985 990

<210> 17

<211> 547

<212> PRT

<213> Artificial sequence

<220>

<223> CFP-RC2(n)TNF

<400> 17

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
1 5 10 15

Gly Ser Thr Gly Asp Arg Leu Leu Arg Ser His Ser Leu His Tyr Leu 20 25 30

Phe Met Gly Ala Ser Glu Gln Asp Leu Gly Leu Ser Leu Phe Glu Ala 35 40 45

Leu Gly Tyr Val Asp Asp Gln Leu Phe Val Phe Tyr Asp His Glu Ser 50 55 60

Arg Arg Val Glu Pro Arg Thr Pro Trp Val Ser Ser Arg Ile Ser Ser 65 70 75 80

Gln Met Trp Leu Gln Leu Ser Gln Ser Leu Lys Gly Trp Asp His Met 85 90 95

Phe Thr Val Asp Phe Trp Thr Ile Met Glu Asn His Asn His Ser Lys 100 105 110

- Glu Ser His Thr Leu Gln Val Ile Leu Gly Cys Glu Met Gln Glu Asp 115 120 125
- Asn Ser Thr Glu Gly Tyr Trp Lys Tyr Gly Tyr Asp Gly Gln Asp His 130 135 140
- Leu Glu Phe Cys Pro Asp Thr Leu Asp Trp Arg Ala Ala Glu Pro Arg 145 150 155 160
- Ala Trp Pro Thr Lys Leu Glu Trp Glu Arg His Lys Ile Arg Ala Arg 165 170 175
- Gln Asn Arg Ala Tyr Leu Glu Arg Asp Cys Pro Ala Gln Leu Gln Gln 180 185 190
- Leu Leu Glu Leu Gly Arg Gly Val Leu Asp Gln Gln Val Pro Pro Leu 195 200 205
- Val Lys Val Thr His His Val Thr Ser Ser Val Thr Thr Leu Arg Cys 210 215 220
- Arg Ala Leu Asn Tyr Tyr Pro Gln Asn Ile Thr Met Lys Trp Leu Lys 225 230 235 240
- Asp Lys Gln Pro Met Asp Ala Lys Glu Phe Glu Pro Lys Asp Val Leu 245 250 255
- Pro Asn Gly Asp Gly Thr Tyr Gln Gly Trp Ile Thr Leu Ala Val Pro 260 265 270
- Pro Gly Glu Glu Gln Arg Tyr Thr Cys Gln Val Glu His Pro Gly Leu 275 280 285
- Asp Gln Pro Leu Ile Val Ile Trp Asp Ser Val Cys Pro Gln Gly Lys 290 295 300
- Tyr Ile His Pro Gln Asn Asn Ser Ile Cys Cys Thr Lys Cys His Lys 305 310 315 320
- Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp 325 330 335
- Cys Arg Glu Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu Asn His Leu 340 345 350
- Arg His Cys Leu Ser Cys Ser Lys Cys Arg Lys Glu Met Gly Gln Val 355 360 365
- Glu Ile Ser Ser Cys Thr Val Asp Arg Asp Thr Val Cys Gly Cys Arg 370 375 380
- Lys Asn Gln Tyr Arg His Tyr Trp Ser Glu Asn Leu Phe Gln Cys Phe 385 390 395 400

Asn Cys Ser Leu Cys Leu Asn Gly Thr Val His Leu Ser Cys Gln Glu 405 410 415

Lys Gln Asn Thr Val Cys Thr Cys His Ala Gly Phe Phe Leu Arg Glu
420 425 430

Asn Glu Cys Val Ser Cys Ser Asn Cys Lys Lys Ser Leu Glu Cys Thr 435 440 445

Lys Leu Cys Leu Pro Gln Ile Glu Asn Val Lys Gly Thr Glu Asp Ser 450 455 460

Gly Thr Thr Val Leu Leu Pro Leu Val Ile Phe Phe Gly Leu Cys Leu 465 470 475 480

Leu Ser Leu Leu Phe Ile Gly Leu Met Tyr Arg Tyr Gln Arg Trp Lys
485
490
495

Ser Lys Leu Tyr Ser Ile Val Cys Gly Lys Ser Thr Pro Glu Lys Glu
500 505 510

Gly Glu Leu Glu Gly Thr Thr Lys Pro Leu Ala Pro Asn Pro Ser 515 520 525

Phe Ser Pro Thr Pro Gly Phe Thr Pro Thr Leu Gly Phe Ser Pro Val 530 535 540

Pro Ser Ser 545

<210> 18

<211> 992

<212> PRT

<213> Artificial sequence

<220>

<223> CFP-RC1(c)TNF

<400> 18

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro 1 5 10 15

Gly Ser Thr Gly Asp Asp Ser Val Cys Pro Gln Gly Lys Tyr Ile His 20 25 30

Pro Gln Asn Asn Ser Ile Cys Cys Thr Lys Cys His Lys Gly Thr Tyr 35 40 45

Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp Cys Arg Glu 50 55 60

Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu Asn His Leu Arg His Cys 70 75 80

- Leu Ser Cys Ser Lys Cys Arg Lys Glu Met Gly Gln Val Glu Ile Ser 85 90 95
- Ser Cys Thr Val Asp Arg Asp Thr Val Cys Gly Cys Arg Lys Asn Gln 100 105 110
- Tyr Arg His Tyr Trp Ser Glu Asn Leu Phe Gln Cys Phe Asn Cys Ser 115 120 125
- Leu Cys Leu Asn Gly Thr Val His Leu Ser Cys Gln Glu Lys Gln Asn 130 135 140
- Thr Val Cys Thr Cys His Ala Gly Phe Phe Leu Arg Glu Asn Glu Cys 145 150 155 160
- Val Ser Cys Ser Asn Cys Lys Lys Ser Leu Glu Cys Thr Lys Leu Cys 165 170 175
- Leu Pro Gln Ile Glu Asn Val Lys Gly Thr Glu Asp Ser Gly Thr Thr 180 185 190
- Val Leu Pro Leu Val Ile Phe Phe Gly Leu Cys Leu Leu Ser Leu 195 200 205
- Leu Phe Ile Gly Leu Met Tyr Arg Tyr Gln Arg Trp Lys Ser Lys Leu 210 215 220
- Tyr Ser Ile Val Cys Gly Lys Ser Thr Pro Glu Lys Glu Gly Glu Leu 225 230 235 240
- Glu Gly Thr Thr Lys Pro Leu Ala Pro Asn Pro Ser Phe Ser Pro 245 250 255
- Thr Pro Gly Phe Thr Pro Thr Leu Gly Phe Ser Pro Val Pro Ser Ser 260 265 270
- Gly Pro Pro Val Ser Cys Ile Lys Arg Asp Ser Pro Ile Gln Cys Ile 275 280 285
- Gln Ala Ile Ala Glu Asn Arg Ala Asp Ala Val Thr Leu Asp Gly Gly 290 295 300
- Phe Ile Tyr Glu Ala Gly Leu Ala Pro Tyr Lys Leu Arg Pro Val Ala 305 310 315 320
- Ala Glu Val Tyr Gly Thr Glu Arg Gln Pro Arg Thr His Tyr Tyr Ala 325 330 335
- Val Ala Val Lys Lys Gly Gly Ser Phe Gln Leu Asn Glu Leu Gln 340 345 350
- Gly Leu Lys Ser Cys His Thr Gly Leu Arg Arg Thr Ala Gly Trp Asn 355 360 365

Val Pro Ile Gly Thr Leu Arg Pro Phe Leu Asn Trp Thr Gly Pro Pro 370 375 Glu Pro Ile Glu Ala Ala Val Ala Arg Phe Phe Ser Ala Ser Cys Val 390 395 Pro Gly Ala Asp Lys Gly Gln Phe Pro Asn Leu Cys Arg Leu Cys Ala 410 Gly Thr Gly Glu Asn Lys Cys Ala Phe Ser Ser Gln Glu Pro Tyr Phe 420 425 Ser Tyr Ser Gly Ala Phe Lys Cys Leu Arg Asp Gly Ala Gly Asp Val 440 Ala Phe Ile Arg Glu Ser Thr Val Phe Glu Asp Leu Ser Asp Glu Ala 450 455 Glu Arg Asp Glu Tyr Glu Leu Leu Cys Pro Asp Asn Thr Arg Lys Pro Val Asp Lys Phe Lys Asp Cys His Leu Ala Arg Val Pro Ser His Ala 490 Val Val Ala Arg Ser Val Asn Gly Lys Glu Asp Ala Ile Trp Asn Leu Leu Arg Gln Ala Gln Glu Lys Phe Gly Lys Asp Lys Ser Pro Lys Phe 520 Gln Leu Phe Gly Ser Pro Ser Gly Gln Lys Asp Leu Leu Phe Lys Asp 530 535 540 Ser Ala Ile Gly Phe Ser Arg Val Pro Pro Arg Ile Asp Ser Gly Leu 545 Tyr Leu Gly Ser Gly Tyr Phe Thr Ala Ile Gln Asn Leu Arg Lys Ser 570 Glu Glu Glu Val Ala Ala Arg Arg Ala Arg Val Val Trp Cys Ala Val 580 585 Gly Glu Gln Glu Leu Arg Lys Cys Asn Gln Trp Ser Gly Leu Ser Glu Gly Ser Val Thr Cys Ser Ser Ala Ser Thr Thr Glu Asp Cys Ile Ala Leu Val Leu Lys Gly Glu Ala Asp Ala Met Ser Leu Asp Gly Gly Tyr 625 630 Val Tyr Thr Ala Gly Lys Cys Gly Leu Val Pro Val Leu Ala Glu Asn 650 Tyr Lys Ser Gln Gln Ser Ser Asp Pro Asp Pro Asn Cys Val Asp Arg

660	665	670

- Pro Val Glu Gly Tyr Leu Ala Val Ala Val Val Arg Arg Ser Asp Thr 675 680 685

  Ser Leu Thr Trp Asn Ser Val Lys Gly Lys Lys Ser Cys His Thr Ala 690 695 700
- Val Asp Arg Thr Ala Gly Trp Asn Ile Pro Met Gly Leu Leu Phe Asn 705 710 715 720
- Gln Thr Gly Ser Cys Lys Phe Asp Glu Tyr Phe Ser Gln Ser Cys Ala 725 730 735
- Pro Gly Ser Asp Pro Arg Ser Asn Leu Cys Ala Leu Cys Ile Gly Asp 740 745 750
- Glu Gl<br/>n Gly Glu Asn Lys Cys Val Pro Asn Ser Asn Glu Arg Tyr Tyr 755 760 765
- Gly Tyr Thr Gly Ala Phe Arg Cys Leu Ala Glu Asn Ala Gly Asp Val 770 780
- Ala Phe Val Lys Asp Val Thr Val Leu Gln Asn Thr Asp Gly Asn Asn 785 790 795 800
- Asn Glu Ala Trp Ala Lys Asp Leu Lys Leu Ala Asp Phe Ala Leu Leu 805 · 810 815
- Cys Leu Asp Gly Lys Arg Lys Pro Val Thr Glu Ala Arg Ser Cys His 820 825 830
- Leu Ala Met Ala Pro Asn His Ala Val Val Ser Arg Met Asp Lys Val 835 840 845
- Glu Arg Leu Lys Gln Val Leu Leu His Gln Gln Ala Lys Phe Gly Arg 850 855 860
- Asn Gly Ser Asp Cys Pro Asp Lys Phe Cys Leu Phe Gln Ser Glu Thr 865 870 875 880
- Lys Asn Leu Leu Phe Asn Asp Asn Thr Glu Cys Leu Ala Arg Leu His 885 890 895
- Gly Lys Thr Thr Tyr Glu Lys Tyr Leu Gly Pro Gln Tyr Val Ala Gly
  900 905 910
- Ile Thr Asn Leu Lys Lys Cys Ser Thr Ser Pro Leu Leu Glu Ala Cys 915 920 925
- Glu Phe Leu Arg Lys Val Pro Pro Leu Val Lys Val Thr His His Val 930 935 940
- Thr Ser Ser Val Thr Thr Leu Arg Cys Arg Ala Leu Asn Tyr Tyr Pro 945 950 955 960

Gln Asn Ile Thr Met Lys Trp Leu Lys Asp Lys Gln Pro Met Asp Ala 965 970 975

Lys Glu Phe Glu Pro Lys Asp Val Leu Pro Asn Gly Asp Gly Thr Tyr 980 985 990

<210> 19

<211> 547

<212> PRT

<213> Artificial sequence

<220>

<223> CFP-RC2(c)TNF

<400> 19

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro 1 5 10 15

Gly Ser Thr Gly Asp Asp Ser Val Cys Pro Gln Gly Lys Tyr Ile His 20 25 30

Pro Gln Asn Asn Ser Ile Cys Cys Thr Lys Cys His Lys Gly Thr Tyr 35 40 45

Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp Cys Arg Glu 50 55 60

Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu Asn His Leu Arg His Cys 65 70 75 80

Leu Ser Cys Ser Lys Cys Arg Lys Glu Met Gly Gln Val Glu Ile Ser 85 90 95

Ser Cys Thr Val Asp Arg Asp Thr Val Cys Gly Cys Arg Lys Asn Gln 100 105 110

Tyr Arg His Tyr Trp Ser Glu Asn Leu Phe Gln Cys Phe Asn Cys Ser 115 120 125

Leu Cys Leu Asn Gly Thr Val His Leu Ser Cys Gln Glu Lys Gln Asn 130 135 140

Thr Val Cys Thr Cys His Ala Gly Phe Phe Leu Arg Glu Asn Glu Cys 150 155 160

Val Ser Cys Ser Asn Cys Lys Lys Ser Leu Glu Cys Thr Lys Leu Cys 165 170 175

Leu Pro Gln Ile Glu Asn Val Lys Gly Thr Glu Asp Ser Gly Thr Thr
180 185 190

Val Leu Leu Pro Leu Val Ile Phe Phe Gly Leu Cys Leu Leu Ser Leu

		195					200					205			
Leu	Phe 210	Ile	Gly	Leu	Met	Tyr 215	Arg	Tyr	Gln	Arg	Trp 220	Lys	Ser	Lys	Leu
Tyr 225	Ser	Ile	Val	Cys	Gly 230	Lys	Ser	Thr	Pro	Glu 235	Lys	Glu	Gly	Glu	Leu 240
Glu	Gly	Thr	Thr	Thr 245	Lys	Pro	Leu	Ala	Pro 250	Asn	Pro	Ser	Phe	Ser 255	Pro
Thr	Pro	Gly	Phe 260	Thr	Pro	Thr	Leu	Gly 265	Phe	Ser	Pro	Val	Pro 270	Ser	Ser
Arg	Leu	Leu 275	Arg	Ser	His	Ser	Leu 280	His	Tyr	Leu	Phe	Met 285	Gly	Ala	Ser
Glu	Gln 290	Asp	Leu	Gly	Leu	Ser 295	Leu	Phe	Glu	Ala	Leu 300	Gly	Tyr	Val	Asp
Asp 305	Gln	Leu	Phe	Val	Phe 310	Tyr	Asp	His	Glu	Ser 315	Arg	Arg	Val	Glu	Pro 320
Arg	Thr	Pro	Trp	Val 325	Ser	Ser	Arg	Ile	Ser 330	Ser	Gln	Met	Trp	Leu 335	Gln
Leu	Ser	Gln	Ser 340	Leu	Lys	Gly	Trp	Asp 345	His	Met	Phe	Thr	Val 350	Asp	Phe
Trp	Thr	Ile 355	Met	Glu	Asn	His	Asn 360	His	Ser	Lys	Glu	Ser 365	His	Thr	Leu
Gln	Val 370	Ile	Leu	Gly	Cys	Glu 375	Met	Gln	Glu	Asp	Asn 380	Ser	Thr	Glu	Gly
Tyr 385	Trp	Lys	Tyr	Gly	Tyr 390	Asp	Gly	Gln	Asp	His 395	Leu	Glu	Phe	Суз	Pro 400
Asp	Thr	Leu	Asp	Trp 405	Arg	Ala	Ala	Glu	Pro 410	Arg	Ala	Trp	Pro	Thr 415	Lys
Leu	Glu	Trp	Glu 420	Arg	His	Lys	Ile	Arg 425	Ala	Arg	Gln	Asn	Arg 430	Ala	Tyr
Leu	Glu	Arg 435	Asp	Cys	Pro	Ala	Gln 440	Leu	Gln	Gln	Leu	Leu 445	Glu	Leu	Gly
Arg	Gly 450	Val	Leu	Asp	Gln	Gln 455	Val	Pro	Pro	Leu	Val 460	Lys	Val	Thr	His
His 465	Val	Thr	Ser	Ser	Val 470	Thr	Thr	Leu	Arg	Cys 475	Arg	Ala	Leu	Asn	Tyr 480
Tyr	Pro	Gln	Asn	Ile 485	Thr	Met	Lys	Trp	Leu 490	Lys	Asp	Lys	Gln	Pro 495	Met

Asp Ala Lys Glu Phe Glu Pro Lys Asp Val Leu Pro Asn Gly Asp Gly

Thr Tyr Gln Gly Trp Ile Thr Leu Ala Val Pro Pro Gly Glu Glu Gln 520 525

Arg Tyr Thr Cys Gln Val Glu His Pro Gly Leu Asp Gln Pro Leu Ile 535

Val Ile Trp 545

<210> 20

<211> 169

<212> PRT

<213> Homo sapiens

<400> 20

Thr Pro Val Ser Gln Thr Thr Ala Ala Thr Ala Ser Val Arg Ser 5

Thr Lys Asp Pro Cys Pro Ser Gln Pro Pro Val Phe Pro Ala Ala Lys 25

Gln Cys Pro Ala Leu Glu Val Thr Trp Pro Glu Val Glu Val Pro Leu

Asn Gly Thr Leu Ser Leu Ser Cys Val Ala Cys Ser Arg Phe Pro Asn 50

Phe Ser Ile Leu Tyr Trp Leu Gly Asn Gly Ser Phe Ile Glu His Leu

Pro Gly Arg Leu Trp Glu Gly Ser Thr Ser Arg Glu Arg Gly Ser Thr

Gly Thr Gln Leu Cys Lys Ala Leu Val Leu Glu Gln Leu Thr Pro Ala 100 105

Leu His Ser Thr Asn Phe Ser Cys Val Leu Val Asp Pro Glu Gln Val 120

Val Gln Arg His Val Val Leu Ala Gln Leu Trp Val Arg Ser Pro Arg 130 135 140

Arg Gly Leu Gln Glu Glu Glu Leu Cys Phe His Met Trp Gly Gly 145 155

Lys Gly Gly Leu Cys Gln Ser Ser Leu

165

```
<210> 21
```

<213> Artificial sequence

<220>

<223> CFP-RC1(n)IL18

<400> 21

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro 1 5 10 15

Gly Ser Thr Gly Asp Gly Pro Pro Val Ser Cys Ile Lys Arg Asp Ser 20 25 30

Pro Ile Gln Cys Ile Gln Ala Ile Ala Glu Asn Arg Ala Asp Ala Val $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Thr Leu Asp Gly Gly Phe Ile Tyr Glu Ala Gly Leu Ala Pro Tyr Lys 50 55 60

Leu Arg Pro Val Ala Ala Glu Val Tyr Gly Thr Glu Arg Gln Pro Arg 65 70 75 80

Thr His Tyr Tyr Ala Val Ala Val Lys Lys Gly Gly Ser Phe Gln 85 90 95

Leu Asn Glu Leu Gln Gly Leu Lys Ser Cys His Thr Gly Leu Arg Arg 100 105 110

Thr Ala Gly Trp Asn Val Pro Ile Gly Thr Leu Arg Pro Phe Leu Asn 115 120 125

Trp Thr Gly Pro Pro Glu Pro Ile Glu Ala Ala Val Ala Arg Phe Phe 130 135 140

Ser Ala Ser Cys Val Pro Gly Ala Asp Lys Gly Gln Phe Pro Asn Leu 145 150 155 160

Cys Arg Leu Cys Ala Gly Thr Gly Glu Asn Lys Cys Ala Phe Ser Ser 165 170 175

Gln Glu Pro Tyr Phe Ser Tyr Ser Gly Ala Phe Lys Cys Leu Arg Asp 180 185 190

Gly Ala Gly Asp Val Ala Phe Ile Arg Glu Ser Thr Val Phe Glu Asp 195 200 205

Leu Ser Asp Glu Ala Glu Arg Asp Glu Tyr Glu Leu Leu Cys Pro Asp 210 215 220

Asn Thr Arg Lys Pro Val Asp Lys Phe Lys Asp Cys His Leu Ala Arg 225 230 235 240

<sup>&</sup>lt;211> 910

<sup>&</sup>lt;212> PRT

- Val Pro Ser His Ala Val Val Ala Arg Ser Val Asn Gly Lys Glu Asp 245 250 255
- Ala Ile Trp Asn Leu Leu Arg Gln Ala Gln Glu Lys Phe Gly Lys Asp 260 265 270
- Lys Ser Pro Lys Phe Gln Leu Phe Gly Ser Pro Ser Gly Gln Lys Asp 275 280 285
- Leu Leu Phe Lys Asp Ser Ala Ile Gly Phe Ser Arg Val Pro Pro Arg 290 295 300
- Ile Asp Ser Gly Leu Tyr Leu Gly Ser Gly Tyr Phe Thr Ala Ile Gln 305 310 315 320
- Asn Leu Arg Lys Ser Glu Glu Glu Val Ala Ala Arg Arg Ala Arg Val 325 330 335
- Val Trp Cys Ala Val Gly Glu Gln Glu Leu Arg Lys Cys Asn Gln Trp 340 345 350
- Ser Gly Leu Ser Glu Gly Ser Val Thr Cys Ser Ser Ala Ser Thr Thr 355 360 365
- Glu Asp Cys Ile Ala Leu Val Leu Lys Gly Glu Ala Asp Ala Met Ser 370 380
- Leu Asp Gly Gly Tyr Val Tyr Thr Ala Gly Lys Cys Gly Leu Val Pro 385 390 395 400
- Val Leu Ala Glu Asn Tyr Lys Ser Gln Gln Ser Ser Asp Pro Asp Pro 405 410 415
- Asn Cys Val Asp Arg Pro Val Glu Gly Tyr Leu Ala Val Ala Val Val
  420 425 430
- Arg Arg Ser Asp Thr Ser Leu Thr Trp Asn Ser Val Lys Gly Lys Lys 435 440 445
- Ser Cys His Thr Ala Val Asp Arg Thr Ala Gly Trp Asn Ile Pro Met 450 455 460
- Gly Leu Leu Phe Asn Gln Thr Gly Ser Cys Lys Phe Asp Glu Tyr Phe 465 470 475 480
- Ser Gln Ser Cys Ala Pro Gly Ser Asp Pro Arg Ser Asn Leu Cys Ala 485 490 495
- Leu Cys Ile Gly Asp Glu Gln Gly Glu Asn Lys Cys Val Pro Asn Ser 500 505 510
- Asn Glu Arg Tyr Tyr Gly Tyr Thr Gly Ala Phe Arg Cys Leu Ala Glu 515 520 525
- Asn Ala Gly Asp Val Ala Phe Val Lys Asp Val Thr Val Leu Gln Asn

	530					535					540				
Thr 545	Asp	Gly	Asn	Asn	Asn 550	Glu	Ala	Trp	Ala	Lys 555	Asp	Leu	Lys	Leu	Ala 560
Asp	Phe	Ala	Leu	Leu 565	Cys	Leu	Asp	Gly	Lys 570	Arg	Lys	Pro	Val	Thr 575	Glu
Ala	Arg	Ser	Cys 580	His	Leu	Ala	Met	Ala 585	Pro	Asn	His	Ala	Val 590	Val	Ser
Arg	Met	Asp 595	Lys	Val	Glu	Arg	Leu 600	Lys	Gln	Val	Leu	Leu 605	His	Gln	Gln
Ala	Lys 610	Phe	Gly	Arg	Asn	Gly 615	Ser	Asp	Cys	Pro	Asp 620	Lys	Phe	Cys	Leu
Phe 625	Gln	Ser	Glu	Thr	Lys 630	Asn	Leu	Leu	Phe	Asn 635	Asp	Asn	Thr	Glu	Cys 640
Leu	Ala	Arg	Leu	His 645	Gly	Lys	Thr	Thr	Tyr 650	Glu	Lys	Tyr	Leu	Gly 655	Pro
Gln	Tyr	Val	Ala 660	Gly	Ile	Thr	Asn	Leu 665	Lys	Lys	Cys	Ser	Thr 670	Ser	Pro
Leu	Leu	Glu 675	Ala	Cys	Glu	Phe	Leu 680	Arg	Lys	Val	Pro	Pro 685	Leu	Val	Lys
Val	Thr 690	His	His	Val	Thr	Ser 695	Ser	Val	Thr	Thr	Leu 700	Arg	Суз	Arg	Ala
Leu 705	Asn	Tyr	Tyr	Pro	Gln 710	Asn	Ile	Thr	Met	Lys 715	Trp	Leu	Lys	Asp	Lys 720
Gln	Pro	Met	Asp	Ala 725	Lys	Glu	Phe	Glu	Pro 730	Lys	Asp	Val	Leu	Pro 735	Asn
Gly	Asp	Gly	Thr 740	Tyr	Thr	Pro	Val	Ser 745	Gln	Thr	Thr	Thr	Ala 750	Ala	Thr
Ala	Ser	Val 755	Arg	Ser	Thr	Lys	Asp 760	Pro	Cys	Pro	Ser	Gln 765	Pro	Pro	Val
Phe	Pro 770	Ala	Ala	Lys	Gln	Cys 775	Pro	Ala	Leu	Glu	Val 780	Thr	Trp	Pro	Glu
Val 785	Glu	Val	Pro	Leu	Asn 790	Gly	Thr	Leu	Ser	Leu 795	Ser	Cys	Val	Ala	Cys 800
Ser	Arg	Phe	Pro	Asn 805		Ser	Ile	Leu	Tyr 810		Leu	Gly	Asn	Gly 815	Ser
Phe	Ile	Glu	His 820	Leu	Pro	Gly	Arg	Leu 825	Trp	Glu	Gly	Ser	Thr 830	Ser	Arg

Glu Arg Gly Ser Thr Gly Thr Gln Leu Cys Lys Ala Leu Val Leu Glu 835 840 845

Gln Leu Thr Pro Ala Leu His Ser Thr Asn Phe Ser Cys Val Leu Val 850 860

Asp Pro Glu Gln Val Val Gln Arg His Val Val Leu Ala Gln Leu Trp 865 870 875 880

Val Arg Ser Pro Arg Arg Gly Leu Gln Glu Glu Glu Leu Cys Phe 885 890 895

His Met Trp Gly Gly Lys Gly Gly Leu Cys Gln Ser Ser Leu 900 905 910

<210> 22

<211> 465

<212> PRT

<213> Artificial sequence

<220>

<223> CFP-RC2(n)IL18

<400> 22

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Trp Val Pro
1 10 15

Gly Ser Thr Gly Asp Arg Leu Leu Arg Ser His Ser Leu His Tyr Leu 20 25 30

Phe Met Gly Ala Ser Glu Gln Asp Leu Gly Leu Ser Leu Phe Glu Ala 35 40 45

Leu Gly Tyr Val Asp Asp Gln Leu Phe Val Phe Tyr Asp His Glu Ser 50 55 60

Arg Arg Val Glu Pro Arg Thr Pro Trp Val Ser Ser Arg Ile Ser Ser 65 70 75 80

Gln Met Trp Leu Gln Leu Ser Gln Ser Leu Lys Gly Trp Asp His Met 85 90 95

Phe Thr Val Asp Phe Trp Thr Ile Met Glu Asn His Asn His Ser Lys
100 105 110

Glu Ser His Thr Leu Gln Val Ile Leu Gly Cys Glu Met Gln Glu Asp 115 120 125

Asn Ser Thr Glu Gly Tyr Trp Lys Tyr Gly Tyr Asp Gly Gln Asp His 130 135 140

Leu Glu Phe Cys Pro Asp Thr Leu Asp Trp Arg Ala Ala Glu Pro Arg

145					150					155					160
Ala	Trp	Pro	Thr	Lys 165	Leu	Glu	Trp	Glu	Arg 170	His	Lys	Ile	Arg	Ala 175	Arg
Gln	Asn	Arg	Ala 180	Tyr	Leu	Glu	Arg	Asp 185	Cys	Pro	Ala	Gln	Leu 190	Gln	Gln
Leu	Leu	Glu 195	Leu	Gly	Arg	Gly	Val 200	Leu	Asp	Gln	Gln	Val 205	Pro	Pro	Leu
Val	Lys 210	Val	Thr	His	His	Val 215	Thr	Ser	Ser	Val	Thr 220	Thr	Leu	Arg	Cys
Arg 225	Ala	Leu	Asn	Tyr	Tyr 230	Pro	Gln	Asn	Ile	Thr 235	Met	Lys	Trp	Leu	Lys 240
Asp	Lys	Gln	Pro	Met 245	Asp	Ala	Lys	Glu	Phe 250	Glu	Pro	Lys	Asp	Val 255	Leu
Pro	Asn	Gly	Asp 260	Gly	Thr	Tyr	Gln	Gly 265	Trp	Ile	Thr	Leu	Ala 270	Val	Pro
Pro	Gly	Glu 275	Glu	Gln	Arg	Tyr	Thr 280	Cys	Gln	Val	Glu	His 285	Pro	Gly	Leu
Asp	Gln 290	Pro	Leu	Ile	Val	Ile 295	Trp	Thr	Pro	Val	Ser 300	Gln	Thr	Thr	Thr
Ala 305	Ala	Thr	Ala	Ser	Val 310	Arg	Ser	Thr	Lys	Asp 315	Pro	Суѕ	Pro	Ser	Gln 320
Pro	Pro	Val	Phe	Pro 325	Ala	Ala	Lys	Gln	Cys 330	Pro	Ala	Leu	Glu	Val 335	Thr
Trp	Pro	Glu	Val 340	Glu	Val	Pro	Leu	Asn 345	Gly	Thr	Leu	Ser	Leu 350	Ser	Cys
Val	Ala	Cys 355	Ser	Arg	Phe	Pro	Asn 360	Phe	Ser	Ile	Leu	Tyr 365	Trp	Leu	Gly
Asn	Gly 370	Ser	Phe	Ile	Glu	His 375	Leu	Pro	Gly	Arg	Leu 380	Trp	Glu	Gly	Ser
Thr 385	Ser	Arg	Glu	Arg	Gly 390	Ser	Thr	Gly	Thr	Gln 395	Leu	Cys	Lys	Ala	Leu 400
Val	Leu	Glu	Gln	Leu 405	Thr	Pro	Ala	Leu	His 410	Ser	Thr	Asn	Phe	Ser 415	Cys
Val	Leu	Val	Asp 420	Pro	Glu	Gln	Val	Val 425	Gln	Arg	His	Val	Val 430	Leu	Ala
Gln	Leu	Trp 435	Val	Arg	Ser	Pro	Arg 440	Arg	Gly	Leu	Gln	Glu 445	Gln	Glu	Glu

```
Leu Cys Phe His Met Trp Gly Gly Lys Gly Leu Cys Gln Ser Ser
                        455
Leu
465
<210> 23
<211>
      910
<212>
      PRT
<213> Artificial sequence
<220>
<223> CFP-RC1(c)IL18
<400> 23
Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
Gly Ser Thr Gly Asp Thr Pro Val Ser Gln Thr Thr Thr Ala Ala Thr
            20
Ala Ser Val Arg Ser Thr Lys Asp Pro Cys Pro Ser Gln Pro Pro Val
Phe Pro Ala Ala Lys Gln Cys Pro Ala Leu Glu Val Thr Trp Pro Glu
Val Glu Val Pro Leu Asn Gly Thr Leu Ser Leu Ser Cys Val Ala Cys
                                                            80
Ser Arg Phe Pro Asn Phe Ser Ile Leu Tyr Trp Leu Gly Asn Gly Ser
Phe Ile Glu His Leu Pro Gly Arg Leu Trp Glu Gly Ser Thr Ser Arg
                                105
Glu Arg Gly Ser Thr Gly Thr Gln Leu Cys Lys Ala Leu Val Leu Glu
       115
                            120
Gln Leu Thr Pro Ala Leu His Ser Thr Asn Phe Ser Cys Val Leu Val
Asp Pro Glu Gln Val Val Gln Arg His Val Val Leu Ala Gln Leu Trp
145
                    150
                                        155
                                                            160
Val Arg Ser Pro Arg Arg Gly Leu Gln Glu Glu Glu Leu Cys Phe
                165
His Met Trp Gly Gly Lys Gly Gly Leu Cys Gln Ser Ser Leu Gly Pro
                                185
```

Pro Val Ser Cys Ile Lys Arg Asp Ser Pro Ile Gln Cys Ile Gln Ala

		195					200					205			
Ile	Ala 210	Glu	Asn	Arg	Ala	Asp 215	Ala	Val	Thr	Leu	Asp 220	Gly	Gly	Phe	Ile
Tyr 225	Glu	Ala	Gly	Leu	Ala 230	Pro	Tyr	Lys	Leu	Arg 235	Pro	Val	Ala	Ala	Glu 240
Val	Tyr	Gly	Thr	Glu 245	Arg	Gln	Pro	Arg	Thr 250	His	Tyr	Tyr	Ala	Val 255	Ala
Val	Val	Lys	Lys 260	Gly	Gly	Ser	Phe	Gln 265	Leu	Asn	Glu	Leu	Gln 270	Gly	Leu
Lys	Ser	Cys 275	His	Thr	Gly	Leu	Arg 280	Arg	Thr	Ala	Gly	Trp 285	Asn	Val	Pro
Ile	Gly 290	Thr	Leu	Arg	Pro	Phe 295	Leu	Asn	Trp	Thr	Gly 300	Pro	Pro	Glu	Pro
Ile 305	Glu	Ala	Ala	Val	Ala 310	Arg	Phe	Phe	Ser	Ala 315	Ser	Cys	Val	Pro	Gly 320
Ala	Asp	Lys	Gly	Gln 325	Phe	Pro	Asn	Leu	Cys 330	Arg	Leu	Cys	Ala	Gly 335	Thr
Gly	Glu	Asn	Lys 340	Cys	Ala	Phe	Ser	Ser 345	Gln	Glu	Pro	Tyr	Phe 350	Ser	Tyr
Ser	Gly	Ala 355	Phe	Lys	Cys	Leu	Arg 360	Asp	Gly	Ala	Gly	Asp 365	Val	Ala	Phe
Ile	Arg 370	Glu	Ser	Thr	Val	Phe 375	Glu	Asp	Leu	Ser	Asp 380	Glu	Ala	Glu	Arg
Asp 385	Glu	Tyr	Glu	Leu	Leu 390	Cys	Pro	Asp	Asn	Thr 395	Arg	Lys	Pro	Val	Asp 400
Lys	Phe	Lys	Asp	Cys 405	His	Leu	Ala	Arg	Val 410	Pro	Ser	His	Ala	Val 415	Val
Ala	Arg	Ser	Val 420	Asn	Gly	Lys	Glu	Asp 425	Ala	Ile	Trp	Asn	Leu 430	Leu	Arg
Gln	Ala	Gln 435	Glu	Lys	Phe	Gly	Lys 440	Asp	Lys	Ser	Pro	Lys 445	Phe	Gln	Leu
Phe	Gly 450	Ser	Pro	Ser	Gly	Gln 455	Lys	Asp	Leu	Leu	Phe 460	Lys	Asp	Ser	Ala
Ile 465	Gly	Phe	Ser	Arg	Val 470	Pro	Pro	Arg	Ile	Asp 475	Ser	Gly	Leu	Tyr	Leu 480
Gly	Ser	Gly	Tyr	Phe 485	Thr	Ala	Ile	Gln	Asn 490	Leu	Arg	Lys	Ser	Glu 495	Glu

- Glu Val Ala Ala Arg Arg Ala Arg Val Val Trp Cys Ala Val Gly Glu
  500 505 510
- Gln Glu Leu Arg Lys Cys Asn Gln Trp Ser Gly Leu Ser Glu Gly Ser 515 520 525
- Val Thr Cys Ser Ser Ala Ser Thr Thr Glu Asp Cys Ile Ala Leu Val $530 \hspace{1.5cm} 535 \hspace{1.5cm} 540$
- Leu Lys Gly Glu Ala Asp Ala Met Ser Leu Asp Gly Gly Tyr Val Tyr 545 550 555 560
- Thr Ala Gly Lys Cys Gly Leu Val Pro Val Leu Ala Glu Asn Tyr Lys
  565 570 575
- Ser Gln Gln Ser Ser Asp Pro Asp Pro Asn Cys Val Asp Arg Pro Val 580 585 590
- Glu Gly Tyr Leu Ala Val Ala Val Val Arg Arg Ser Asp Thr Ser Leu 595 600 605
- Thr Trp Asn Ser Val Lys Gly Lys Lys Ser Cys His Thr Ala Val Asp 610 615 620
- Arg Thr Ala Gly Trp Asn Ile Pro Met Gly Leu Leu Phe Asn Gln Thr 625 630 635 640
- Gly Ser Cys Lys Phe Asp Glu Tyr Phe Ser Gln Ser Cys Ala Pro Gly 645 650 655
- Ser Asp Pro Arg Ser Asn Leu Cys Ala Leu Cys Ile Gly Asp Glu Gln 660 665 670
- Gly Glu Asn Lys Cys Val Pro Asn Ser Asn Glu Arg Tyr Tyr Gly Tyr 675 680 685
- Thr Gly Ala Phe Arg Cys Leu Ala Glu Asn Ala Gly Asp Val Ala Phe 690 695 700
- Val Lys Asp Val Thr Val Leu Gln Asn Thr Asp Gly Asn Asn Asn Glu
  705 710 715 720
- Ala Trp Ala Lys Asp Leu Lys Leu Ala Asp Phe Ala Leu Leu Cys Leu 725 730 735
- Asp Gly Lys Arg Lys Pro Val Thr Glu Ala Arg Ser Cys His Leu Ala 740 745 750
- Met Ala Pro Asn His Ala Val Val Ser Arg Met Asp Lys Val Glu Arg
  755 760 765
- Leu Lys Gln Val Leu Leu His Gln Gln Ala Lys Phe Gly Arg Asn Gly 770 780

Ser Asp Cys Pro Asp Lys Phe Cys Leu Phe Gln Ser Glu Thr Lys Asn 785 790 795 800

Leu Leu Phe Asn Asp Asn Thr Glu Cys Leu Ala Arg Leu His Gly Lys 805 810 815

Thr Thr Tyr Glu Lys Tyr Leu Gly Pro Gln Tyr Val Ala Gly Ile Thr 820 825 830

Asn Leu Lys Lys Cys Ser Thr Ser Pro Leu Leu Glu Ala Cys Glu Phe 835 840 845

Leu Arg Lys Val Pro Pro Leu Val Lys Val Thr His His Val Thr Ser 850 855 860

Ser Val Thr Thr Leu Arg Cys Arg Ala Leu Asn Tyr Tyr Pro Gln Asn 865 870 875 880

Ile Thr Met Lys Trp Leu Lys Asp Lys Gln Pro Met Asp Ala Lys Glu 885 890 895

Phe Glu Pro Lys Asp Val Leu Pro Asn Gly Asp Gly Thr Tyr 900 905 910

<210> 24

<211> 465

<212> PRT

<213> Artificial sequence

<220>

<223> CFP-RC2(c)IL18

<400> 24

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro 1 5 10 15

Gly Ser Thr Gly Asp Thr Pro Val Ser Gln Thr Thr Thr Ala Ala Thr 20 25 30

Ala Ser Val Arg Ser Thr Lys Asp Pro Cys Pro Ser Gln Pro Pro Val 35 40 45

Phe Pro Ala Ala Lys Gln Cys Pro Ala Leu Glu Val Thr Trp Pro Glu 50 55 60

Val Glu Val Pro Leu Asn Gly Thr Leu Ser Leu Ser Cys Val Ala Cys 65 70 75 80

Ser Arg Phe Pro Asn Phe Ser Ile Leu Tyr Trp Leu Gly Asn Gly Ser 85 90 95

Phe Ile Glu His Leu Pro Gly Arg Leu Trp Glu Gly Ser Thr Ser Arg 100 105 110

Glu	Arg	Gly 115	Ser	Thr	Gly	Thr	Gln 120	Leu	Cys	Lys	Ala	Leu 125	Val	Leu	Glu
Gln	Leu 130	Thr	Pro	Ala	Leu	His 135	Ser	Thr	Asn	Phe	Ser 140	Cys	Val	Leu	Val
Asp 145	Pro	Glu	Gln	Val	Val 150	Gln	Arg	His	Val	Val 155	Leu	Ala	Gln	Leu	Trp 160
Val	Arg	Ser	Pro	Arg 165	Arg	Gly	Leu	Gln	Glu 170	Gln	Glu	Glu	Leu	Cys 175	Phe
His	Met	Trp	Gly 180	Gly	Lys	Gly	Gly	Leu 185	Cys	Gln	Ser	Ser	Leu 190	Arg	Leu
Leu	Arg	Ser 195	His	Ser	Leu	His	Tyr 200	Leu	Phe	Met	Gly	Ala 205	Ser	Glu	Gln
Asp	Leu 210	Gly	Leu	Ser	Leu	Phe 215	Glu	Ala	Leu	Gly	Tyr 220	Val	Asp	Asp	Gln
Leu 225	Phe	Val	Phe	Tyr	Asp 230	His	Glu	Ser	Arg	Arg 235	Val	Glu	Pro	Arg	Thr 240
Pro	Trp	Val	Ser	Ser 245	Arg	Ile	Ser	Ser	Gln 250	Met	Trp	Leu	Gln	Leu 255	Ser
Gln	Ser	Leu	Lys 260	Gly	Trp	Asp	His	Met 265	Phe	Thr	Val	Asp	Phe 270	Trp	Thr
Ile	Met	Glu 275		His	Asn	His	Ser 280	Lys	Glu	Ser	His	Thr 285	Leu	Gln	Val
Ile	Leu 290		Cys	Glu	Met	Gln 295		Asp	Asn	Ser	Thr 300	Glu	Gly	Tyr	Trp
Lys 305		Gly	Tyr	Asp	Gly 310	Gln	Asp	His	Leu	Glu 315		Cys	Pro	Asp	Thr 320
Leu	Asp	Trp	Arg	Ala 325		Glu	Pro	Arg	Ala 330		Pro	Thr	Lys	Leu 335	Glu
Trp	Glu	ı Arg	His 340		Ile	Arg	Ala	Arg 345		. Asn	Arg	Ala	Tyr 350		Glu
Arg	, Asp	Cys 355		Ala	Gln	Leu	Gln 360		. Leu	ı Lev	Glu	Leu 365		Arç	Gly
Val	. Lei		Glr	Glr	val	Pro		Let	ı Val	Lys	Val 380		His	His	: Val

Thr Ser Ser Val Thr Thr Leu Arg Cys Arg Ala Leu Asn Tyr Tyr Pro 385 390 395 400

Gln Asn Ile Thr Met Lys Trp Leu Lys Asp Lys Gln Pro Met Asp Ala 405 410 415

Lys Glu Phe Glu Pro Lys Asp Val Leu Pro Asn Gly Asp Gly Thr Tyr 420 425 430

Gln Gly Trp Ile Thr Leu Ala Val Pro Pro Gly Glu Glu Gln Arg Tyr 435 440 445

Thr Cys Gln Val Glu His Pro Gly Leu Asp Gln Pro Leu Ile Val Ile 450 455 460

Trp 465